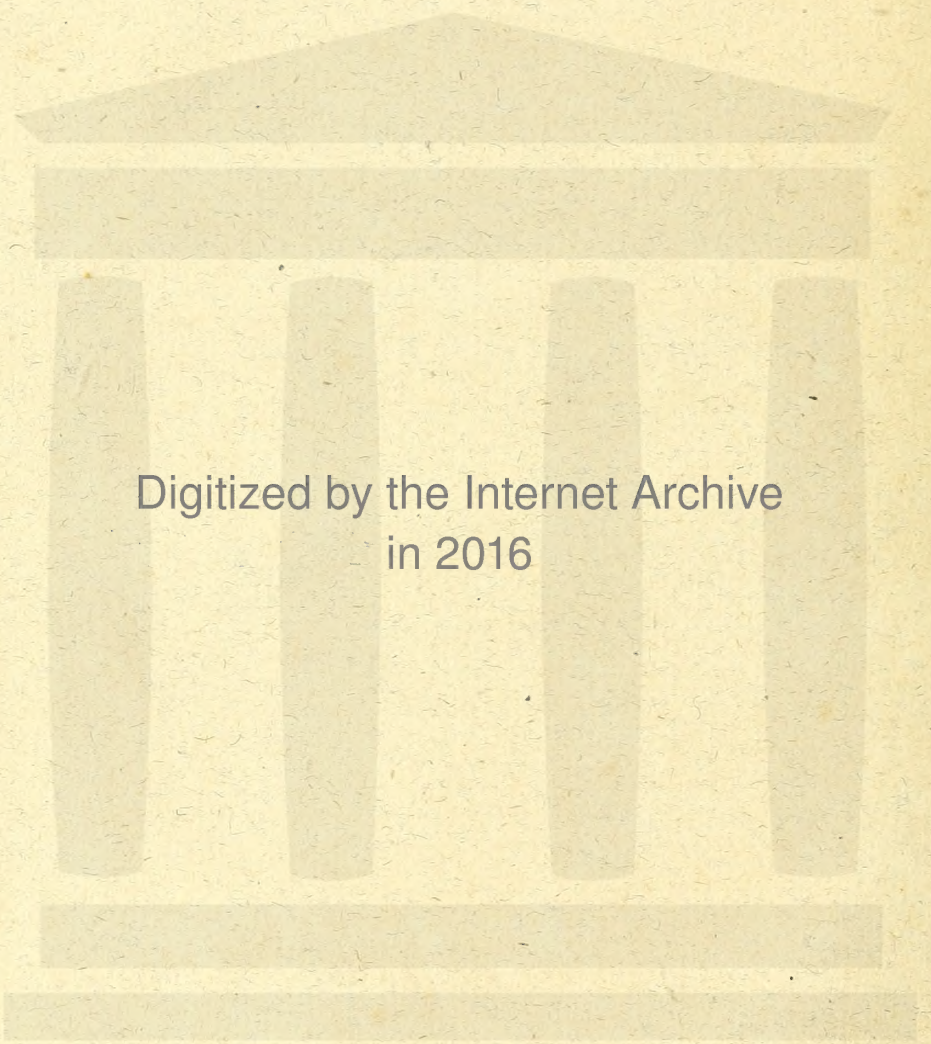
Rare Book Dept.
No. G.X01.73
The Public Library of the City of Boston.

Britwell Court
Bought April 4, 1924 £200.

74 E. 14.

Lewes. Jan 1830. Binding & Cleaning. 3. 3.


Digitized by the Internet Archive
in 2016

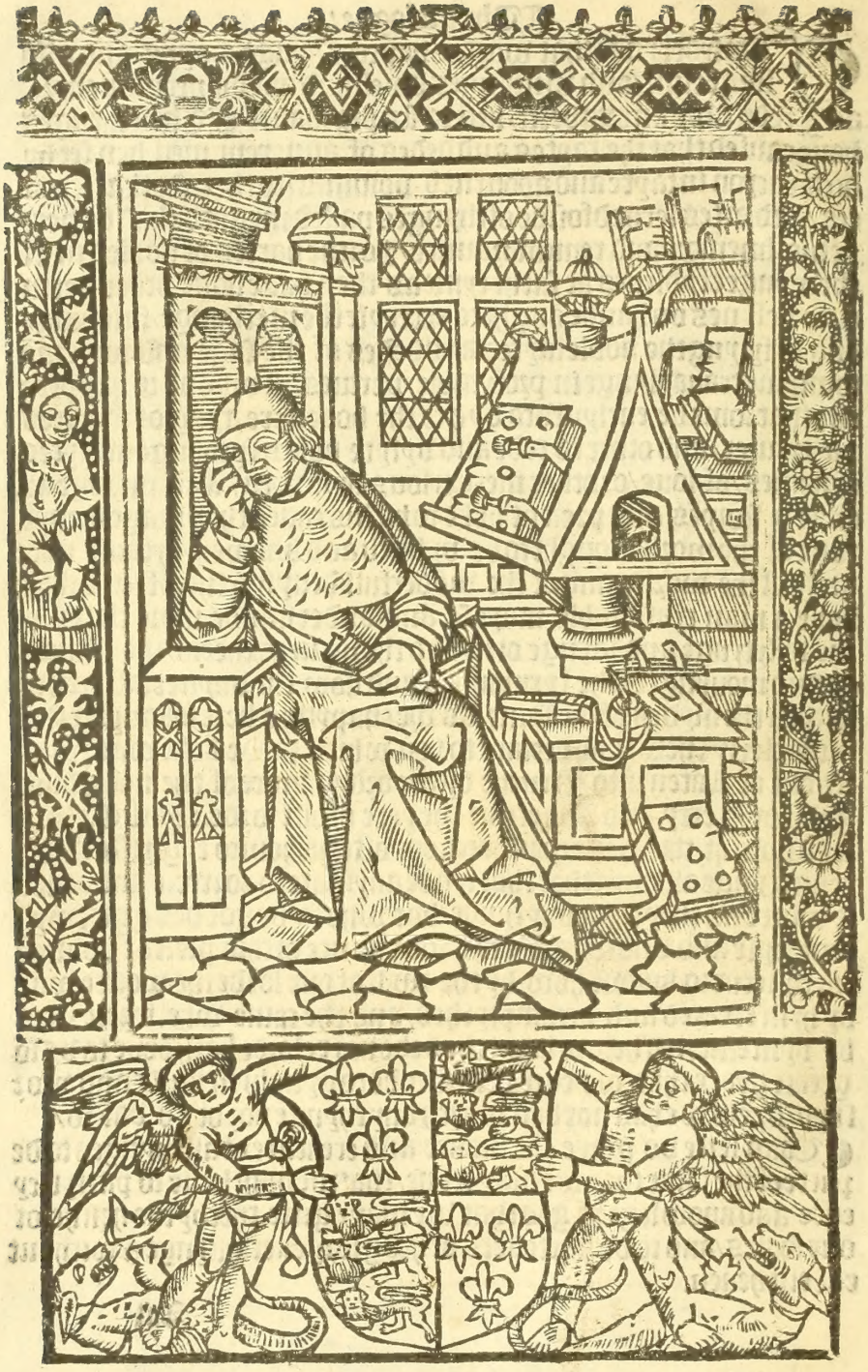
https://archive.org/details/myrrourdyscrypcy00goss

The myrrour:

A dyscrypcyon of the Worlde With many meruaylles. & the.vii. Scyences As Gramayre/Rethorike wyth the arte of memorye/ Logyke/Geometrye/wyth the standarde of mesure & weyght/ and the knowlege how a man shulde mesure londe/borde/& tymber/ and than Arismetryke wyth the maner of accoũtes and rekenynges by cyfres/and than Musyke/and Astronomye/with many other profytable and pleasant cõmodytes.

Josiah H. Benton Fd.
Oct. 17, 1941
U
** G.K01.73

Onsyderynge that wordes be perysshynge/bayne/and also forgetfull/and wyttynges dwell and abyde permanent/ as I rede (Uox audita perit/littera scripta manet) ¶ These thynges haue caused that the faytes and dedes of auncyent men ben set by declaracyon in fayre and adourned volumes/to the ende that scyences/and artes lerned foūde of thynges passed myght be had in perpetuall memory and remembraunce/For the hartes of nobles in eschewynge of ydlenes at suche tyme as they haue none other vertuouse besynes on hande ought to exercyse thē in redynge/studyeng/ and bysyynge the noble faytes and dedes of the sage and wyse mē somtyme trauaylynge in profytable vertues/of whom it happety oftetthat some be enclyned to bysyte the bokes treatyng of scyences partyculer/and other to rede and bysyte bokes spekynge of faytes of armes/of loue/or other meruelous hystoryes/And amonge all other hystoryes this present boke whichis called the ymage or myrrour of the worlde/ought to be bysyted and knowen/bycause it treatethof the worlde and of the wōderfull deuysyō therof/in which boke a man reasonable maye se and vnderstande more clerer by the bysytynge and sayngе ouit/and the fygures therin/the sytuacyon and mouynge of the fyrmament and how the vnyuersall erth hāgeth in the mydes of the same/as the chappytres here folowyng shal more clerly shewe and declare to you which sayde boke was trāslated out of Laten into Frenche by the ordynaunce of the noble duke Johñ of Berry and Auuergne the yere of our lorde. M. CC. xlv. And now at this tyme translated out of frenche into englysshe/humbly requyrynge all them that shal fynde any faute to correcte and amēde it where as they shall ony fynde/but who so by goodes grace wyll compryse and vnderstande the substaunce of this present volume for to lerne to knowe how by the wyll of our lorde the worlde was by hym created and accomplyshed/and the cause wherefore it was by hym establysshed/wherof the debonayre lorde hath done to vs so greate grace that we euer ben bounde to gyue hym laude and worshyp/or els we had not ben worthy ony thynge nor of no valew/ ¶ Than lette vs praye the maker and creature of all thynges to departe of the same that we may lerne/that we may haue to parfyt science and knowlege of god that we maye gette therbythe helthe of our soules/and to be parteners of his glory euerlastynge & without ende in heuen.



Here beginneth the table of the Rubrices of this
present volume/

¶ And speketh fyrst of the power and puyssaū
ce of god. capitulo. .primo.

¶ Wherfore god made & created the worlde/
ca. u.

¶ Wherfor god formed man to hys semblaunce/ capitulo iii.

¶ Wherfore god made not man suche as he myghte not synne/
Capitulo. .iiii/

¶ Wherfore and how the seuen Artes Lyberall were founde and
of theyr ordre/ ca. .v

¶ Of thre maner of people and how clergy cam fyrst into Fraunce/
capitulo. vi.

¶ And fyrst speketh of gramayre. ca. vii.

¶ And after of retorike. ca. viii.

¶ After of logyke ca. ix.

¶ After of geometry. ca. x.

¶ After of arismetryke ca. xi.

¶ After of musyke ca xii.

¶ And han of Astronomy ca. xiii.

¶ And after it speketh of nature how she worketh and what she is
capitulo. xiiii.

¶ Of the fourme of the fyrmament. capitulo. xv.

¶ How the foure elementes ben sette. capitulo. xvi/

¶ How the erthe holdeth hym ryghte in the myddle of the worlde.
capitulo/ xvii.

¶ What the roundenes of the erthe is. ca. xviii.

¶ Wherfore god made the world round/ capitulo. xix.

¶ Of the mouyng of the heuen and of the .vii. planetes and of the
reylnes of the erthe vnto the regard of heuen/ ca. xx.

Here endeth the fyrst partye of the Rubryces/
of thys present booke/

¶ Here begynneth the seconde partye of the Rubryces of this present boke.

¶ Fyrst declareth how the erthe is deuyded. Ca. i.
¶ What partye the erth may be enhabyted/ Capl°. ii.
¶ After it speketh of paradys terrestre & hys .iiii. flodes/ Ca. .iii
¶ Of the regyons of ynde & of thynges founde there/ Ca. iiii.
¶ Of the dyuersytees beyng in the lande of ynde/ Ca. v.
¶ Of the serpentes & of the beetles of Inde/ Ca. vi.
¶ Of the precyous stones and of the great vertue wych growe in the realme of Inde. Capitulo. vii.
¶ Of the londes and contrees of Inde/ Ca. viii
¶ Of the fyllyes that ben founde in Inde/ Ca. ix.
¶ Of the trees that be in Inde & of theyr fruyte. Ca. .x.
¶ Of Europe and of hys contrees/ Ca. xi.
¶ Of Aufryke & his regyons and contreys. Ca .xii.
¶ Of dyuerse Iles of the see/ Capitulo/ xiii.
¶ Of the dyuersytees that ben in europe and aufryke. Ca. xiiii.
¶ Of the maner and condycyon of beestes of the same contrees/ Capitulo/ xv/
¶ Of the maner of the byrdes of the same contres. Ca. xvi.
¶ Of the dyuersytes of somme comyn thynges Capitulo. xvii.
¶ To know where hel is sette & what it is. Ca. xviii.
¶ How the water renneth by the erthe/ Ca. xix.
¶ How the fresshe water/ & salt/ hote/ and poisoned sourd. Ca. xx.
¶ Of dyuerse fontayns that sourde in the erthe/ Capitulo. xxi.
¶ Wherfore & how the erth quaueth & trembleth. Ca. xxii.
¶ How the water of the see beioneth salte/ Ca. xxiii.
¶ Of the ayre and of his nature. Ca. xxiiii.
¶ How the clowdes and raynes come comenly/ Ca. xxv.
¶ Of the frostes & snowes. ca. xxvi.
¶ Of hayll and tẽpestes/ Capitulo. xxvii.
¶ Of lyghtnynges and thonders. Capitulo. xxviii.
¶ For to knowe how the wyndes growe/ capitulo/ xxix
¶ Of the fyre & the sterres wych seme to falle/ Ca. xxx.
¶ Of the pure ayer and how the .vii. planets ben sette/ ca. xxxi.
¶ How the vii. planets gyue names to the .vii. dayes. ca. xxxii
¶ Of the tornyng of the firmament and of the sterres/ ca xxxiii.

¶ Here endeth the second partye of the table of the Rubryces of this present boke/

¶ Here begynneth the thyrde parte of the table of this present boke
¶ Fyrst how the daye and the nyght come. Ca. primo
¶ Wherfore men se no sterres by day lyght/ ca ii.
¶ Why men se not the sonne by nyghte. ca. iii.
¶ Why the mone receyueth dyuersly her lyght & clernes. ca. iiii.
¶ How the eclypses of the mone come. ca. v
¶ Of the eclypses of the sonne. ca. vi.
¶ Of the eclipse that felle at the dethe of our lorde. ca. vii.
¶ Of the vertue of the heuen and of the sterres. ca. viii.
¶ Wherfore and why the worlde was measured. ca. ix.
¶ Of kynge Tholomeus and of other philosophers. ca .x.
¶ How the scryptures and scyences were saued agaynste the flode/ capitulo. .xi.
¶ Of them that foūd the scyence and clergy after the flode. ca. xii.
¶ Here after is sayde in substaunce of the meruayles that vyrgyll made by astronomy in his tyme by his wytte. ca. xiii
¶ Wherfore money was made ca. xiiii
¶ Of the philosophers that went thrughe the worlde ca. xv.
¶ What thynge is philosophy & of the answere that plato made/ Ca. xvi.
¶ How moche the erthe hath of heyght/ how moche in circuyte & how thycke in the myddly/ Capitulo. xvii/
¶ How moche the mone and the sonne haue eche of them of theyr propre heyghte/ Capitulo. xviii
¶ Of the heyghte and gretenes of the sterres/ ca. xix.
¶ Of the nombre of the sterres/ ca. xx.
¶ Of the gretenes of the fyrmament and of heuen that is aboue/ Capitulo. xxi.
¶ Of heuen Crystalyn and heuen emperial. Ca. xxii.
¶ Of celestyall paradys Capl°. xxiii.
¶ After thys foloweth the Recapitulacyon of the thynges aforsayd Capitulo. xxiiii.

¶ Here endeth the table of the Rubry-
ces of thys present booke/

¶ Here begynneth the boke callyd the myrrour of the worlde. And treateth fyrst of the power and puyssaunce of god/

Capitulo primo.

¶ Thought to knowe that whan our lorde god had made the worlde/ & that he had made all thynges of nought he had no nede of it. For as moche haddehe before/ as he had afterward. Certaynly god was tofore/and shalbe incessauntly after without ende/and without begynnynge/ Than he shal nothyng amende ne be the better/for hym fayled neuer ony thynge/he seeth all/hereth all/knoweth/all/ And holdeth al thyng in hys hond. He had neuer hunger ne thurst tyme/ne day/ne hour/but abydeth contynually in all good/For to hym ne apparteyneth soon ne late/And of al them that euer were/ that ben/and shall be/haue alway ben and shal be to forehis eyen as well the ferre as the nere/And the eupl as the good/he saw as well the worlde ere it was made and fourmed as he dothe nowe at this daye/ ¶ And yf he had neuer made the worlde/ as moche had he ben than worth/and of as great valew as he euer myght haue be. ¶ For other wyse he myght not be god. yf he knewe not saw not/and herde not all that myght be/And yf he were not so he sholde be lackyng and not myghty of euery thynge. ¶ And of so moche he was and shold be a mortall man/but his nature was not suche/For he is god entyerly and hooll without begynnynge and without ende/ Nothynge is to hym new ne olde/ Al well and good thynges ben hys by ryght. And by nature goon & retourne ageyn to hym/For fro hym al thinges cometh & procedeth And retornyng to hym in holdyng the ryght waye. He retcheth neuer of ony harme For his bounte is all pure/clene/hole and clere without any espece of eupll/Certes all eupllys ben to hym cõtrarypous/And therfore it is pure necessyte that they withdraw them vnder hym & fro all hys goodnes for it is nothynge but donge and ordure/ whiche muste nedes descende in to the depest /And the good thynges must nedes goo vpward to fore the souerayne creatour whiche is clerenet and pure/And the synnes which ben obscure/horryble/ and derke aboue all other thynge leuen the goode which is about and auale and go down/For so behouethit to be by reason and nature/Al unlyke wyse as we see the ordure of the wyn that is put in the vessel. and the soule departeth fro the clere /In suche wyse as the good and clere abydeth aboue/And the elles which is thordure abideth byneth/

in the bottom/as enfect & not good. And the good wyne that is abo
ue abydeth alway clere and fyne/And that which is not good that
is benethe in the bottom abydeth alway obscure/fowle/and black/
& so moch the more as the wine is good & more clere. so moch more
reteyneth the lye more of fylthe and obscure/thus is it of the good
& euyl/For the euyl must descēd in to places horrible & dark/& ful of
al sorow and bytternes/And so moch more as the good thyneth to-
fore god and the more it ioyeth/so moch the more sorow and derke-
nes is in hell/where it is contynually and shall be as longe as god
shalbe in heuen/where as god hath all goodnes to fore hym and al
way shal haue without payn/without trauail/and without griefe
or enoy he hath al/and all he enlumyneth without any defaut and
without ony terme/god may make al thynge/and all deffete or vn
make without chaungynge hym selfe in ony thynge that may be/
For he may all and conceyueth al/There is nothyng that may hurt
hym/he is establed without any meuyng/And al meuynges meue
of hym/An hondred thousand yere mount not to hym so moche as
the thousand part of one only houre of this worlde/ne to al them that
be in heuen/of which the lefte that abydeth there hath more ioye in
an houre onely and of deduit/solas/gladnes/& of honour of which
he shal neuer be weryful/than ony man may thynke/ne knowe
ne estyme in this worlde in an hondred thousande yere yf he myght
so longe lyue and endure/though he were the most subtil man that
euer was borne or shalbe/though he thought the best he myghte
¶Of this so great and Inestimable glory is god the veray and so
uerayn lorde without ony other/as god that all knoweth and all se
eth/al that euer hath ben/al that is/that euer shallbe/and al that
belongeth to hym/Hym fayled neuer ony thynge that is good/he
hath them alway tofore hym/For there was neuer ony good thyn
ge ne neuer shallbe/But that it was portrayed tofore hym/before
the creacion of the worde/Now shalye here why & wherfore god
created and made the worlde/

¶Wherfore god made and created the worlde/
Capitulo ii.

God made & created al the worlde of his only wyll bycause that he nught haue some thynge that myght be suche as myght deserue of his wele & goodnes if it were not in his defaut/ And therfore he establysshed this worlde nothyng for that he sholde be the better / ne that he had ony nede/ But he dyd it for charyte & by his greate debonayrte/for as ryght charytable/he wolde that other sholde part with hym of his wele and goodnes/ And that all other creaturys euerych after his nature sholde fele of his puyssaunce after that it myght appertayne to hym/Thus wolde god establysshy this worlde that suche thynge shold yssue that myght vnderstande & know the nobleste of his power and of his sapiens/& also of the good that he had made for the man erthly/that he myght serue hym suchmaner that by hi he might deserue the great wele & good that he had made for hi/thā ought we aboue al other thyng to loue hym & thāk hym that made and fourmed vs/whan we haue power and such auctoryte by hym/that yf we wyll loue hym we shal be lord of al goodes Now loue we hym than with all our myght/& than shal we do as wyse men/ And yf we do not we shal haue great harme and damage/ For yf we by our cause lose such goodes as our lord hath made for vs/yet for all that god shall lese no thyng/ Certaynly he made them to thend that we sholde haue thē sith that by our good dedes we might conne deserue them/and that he of his grace hath gyuen to vs the wytte/thentendement and the power/

¶ Wherfore god fourmed man lyke vnto his ymage and to his semblaunce/

Capitulo iii.

¶ Thē god fourmed man he wold make & create hym lyke vnto his ymage and semblaunce/to thende that he sholde haue remembraunce of the goodes that he hadde lente hym/ ¶ And that he myght deserue thē all by ryght and reason/For he shewed to hym so grete loue/that aboue al other creatures he fourmed hym to hys fygure and semblaunce/And gaue to hym naturally ryghte parfyte vnderstandynge for to loue and knowe hym more than ony other thynge /to thende that he myght parte more largely of his goodes than ony other creature/He god dyd neuer ne made for other creature so many good thynges/as he hath made for man/But who is he that wyll deserue them/And yf he doo not it is reason that he sorowe.For he doth to god no bounte. that doth wel for to haue his grace and his loue/For he doth it more for hys owne profyte /than he doth it for other /And therfore he dothe wel that loueth and serueth hym/ For moche may he calle hym selfe caytyfe and mescheaunt /that by hys foly leseth so hye/so noble/and so eccellente glorye/For hys synne that profyteth hym nought. And hath not in thende but shame and blame And draweth hym in to suche an horryble place where as is nothynge but payne/yre/sorowe/and heynesse/of whiche he shall neuer se hym delyuerȳd as longe as he lyueth. Thus hath he losse the greate ioye that was gyuen to hym /whiche is taken awaye by his synne/ And myghte haue bene a lorde yf he hadde wolde/yf he had mayntened hym selfe in doynge alway good workis/and wolde haue absteyned and kepte hym from doyng euyll/ For who that dothe wellin this worlde he hath so moche good and

honour that the aungels of heuen make hym theyr lorde and may ster/ before god kynge of all kynges/ Than he may well holde hym for eorous and happy that doth so moche good in erthe dureyng his lyfe that may conquere and haue this honoure/ And that may euery persone do all for hym selfe yf it plesyth hym/

¶ Now late euerych doo as hym goode shal seme. and take which that he wylle/ For he may wynne by doyng well and also lese by doyng euyll/

¶ Wherfore god made not the man/ suche as he myght not synne/
Capitulo .xii.

WHan our lorde god created the man/ he gaue to hym power to do his fre wyll. That is to wete to do good or euyl whiche he wolde/ For yf god hadde made the man suche as he myght not haue synned ne to haue done nothynge but wel/ he sholde haue take from hym somwhat of his power/ For he myght not than haue done euyll whan it had plesyd hym/ And than it sholde haue folowed/ that wold he or not/ he shold alwaye haue don well without reason/ And thus he sholde not haue ben cause of the goode that he sholde haue done/ but it sholde haue proceded of an other which by force shold haue caused hym and haue gyuē him thy wylle/ ¶ And he by the mean of that he sholde doo/ shold deserue the guerdon/ and not onely he/ For lytell deserueth he that by force of other doth seruise/ who that to morow shold put me in a strōg prison agaynste my wylle for to doo goode/ I sholde not holde hym for wyse/ For he sholde do me wronge/ Neuertheles it was well in our lordes power yf it hadde plesed hym to haue made man suche that he sholde not haue synned ne haue done any harme or euyll/ But he had not deserued yet suche meryte ne rewarde as he now doth in no tyme of the worlde/ And therfore god gaue to man playn fre wyll to do well or euyl to thende that in wel doyng and leuyng the euyll he myght haue more meryte/ For otherwyse he myght not deserue so moche/ yf god had made thaungels suche as myght not haue synned deedly/ ne haue done euyll/ For that yet sholde not they deserue so noble a gyft as the men/ And whothat wyll deserue these hye merytes/ he ought gladly wyth entyer harte and parfyte serue by greate loue and great reuerence hym that hathe made hym for to conquere and come to the moste hye honour

And our lorde god wolde that man were suche/ that by ryght he
myght deserue as moche good a boute hym as he hym selfe hath
¶ And therfore he gaue to hym wytte and reason for to haue entencion to hym/ For by ryght he ought well to serue hym. Thenne is he a mochefole that purueyeth not to do well whyles he is here lynge/ For all the good that euery man shall do. shall be for hym selfe/ and all the euyll also/ And eche man shall haue for one good thynge an hondred good thynges/ and for one euyll/ an hondred euilles. For he is a mochefool that weneth to doo god ony bounte of his goodes i ony maner that it be/ And whan he absteyneth hym fro doyng euyll so moche our lorde holdeth hym the derer. and loueth hym the better/ For yf he loste al the worlde/ our lorde shoulde neuer be the lasse worthy.ne none of the goodys that ben in his power/ yf al the sayntes that euer were tofore i the world or euer shal be/ hadde neuer don goode/ ¶ And that al by theyr demerites were perpetuelly dampned i helle. yet for al that our lord god shold neuer haue the lasse Joye ne consolacyon. And shold not be the lasse worthy.ne no thynge that is in heuen/ But the sayntes were wyse prudēt/ and constaunt/ for to doo well and prouffyt/ as they that playnely knewe that this worlde is not but a vayn thynge and trasitory/ And had moche leuer to suffre payns and trauails/ and offre theyr bodyes to torment and martyrdom and to haue shames blasphemyes and other Jniuryes for the loue of our lorde in thys miserable worlde that so lytyll whyle endureth/ And to haue the goodes of heuen euerlastyng/ than to haue ease chaungeable to the body/ for to haue payne perdurable/ They retched not ne hade no charge of suche goodis that at laste shoulde be of no valewe/
¶ But they toke the brydle by the teeth for to gete the ryght hye wytte and vnderstandyng of heuen/ And ther ben many of them that yelde them for foolys in thys worlde/ the whiche now at this tyme haue theyr neckys charged/ of which the other be deliuerȳd. For they ben herbered i heuen/ And yet holde they many a wyse man for fol(that preyse not moche their wordes/ There ben plenty of wyse people in heuen now/ that yf they hadde preysed the folisshe dytes or laynges/ and the folysshe werkys of the people that so moch coueyte the honoure and loos of this worlde for the worde of foles/ that they hade lefte the commaundementes of god/ Jn whiche the sayntes in heuen dyd greatly theyre deuoyre/ For they lefte not for the delytes of the worlde for to serue theyr maker and creatoure for to gette heuen/ where as they shall haue Joye and all

honour as they that ben lordes and shalbe without ende.
¶ And yf they hadde done otherwyse they shold haue perpetuelly shame/ fylth/ & tourmentys of hell/ where as ben all the euils that man can deuyse/ ¶ It is moche greate meruaylle of this worlde how that it is so that there ben so moch people that wyl suffre payne and trauaylle moze for to gette loos of the people oz foz to amasse grete tresours. the which so lytyl tyme abyde wyth them that in an one hour fayll/ than they wylle doo foz to conquere the goodes of our lorde the whiche shal neuer fayll whiche the blyssyd sayntes haue goten by a lytyll hard lyf that they haue endured in thys worlde that me semeth but a ryght delyte to them that of good herte do it/ And in thende it sempth to them/ that foz lytell oz nought they haue goten heuen/ and all thus may euery persone gette it/ and be comyn of the goodes of our lorde and haue the Joyes and glorye of heuen/ yf the defaulte be not in them selfe/ But they that delyre the Joyes the glorye and honours of thys worlde/ they empayre them selfe so moche that they may not lerne no good ne entende to theyr saluacyon/ And hadde moche leuer the ease & consolacyons of the body of whiche they bene so sone put oute/ and brought to sorow and payne than they doo the ease of the soule which endureth without ende/ Me they prayse not the wyt ne entendement of the man yf he can not well haue hym in the worlde and haue plenty of temporall goodes/ by the whyche he maye be enhaũsed and lyft vp in the worlde/ but saye he is nyce and folysshe by cause he can not knowe theyre malyces & cawteles/
¶ But al they bene cursed of god by the mouthe of dauid the prophete that so payne them to please the worlde by all the wayes that they can doo. Foz suche pryde is vayne thynge by whiche the soule is empayred/ of whom dauid saith i the psaulter accursid be al they and confused/ as people of euyle that please the worlde/ ¶ Foz of all goodes they extende them and dyscorde fro god and fro his loue/ Sythe they haue gyuen them and that they accorde them to the worlde to hys vanytees and delytes. Foz god hath them all in despyte/ and put them from his grace/ by cause they seche the loos and the glorye of the worlde/ In whiche he was put out and sett a backe and in thende crucyfyed and holden foz a fole/
¶ Thus sayth our lorde god in hys gospell/ that all they shall be blessyd of hym that haue the worlde in dyspite/ ¶ And shal be as people/ hated/ defowled and cast out as foles/ foz the loue of me & my name/ Foz they shal haue in heuen their reward & guerdõ/

And thys may euery man see yf god hym selfe lye not And trouthe may not be false/that they whyche please the world/and wyll haue and take the loos and glorye of the worlde it may not be but they after haue sorow/ ¶Therfore he is a fole that seeheth to haue it by cause all they that wynne or pourchase it.be euyll counseyled/For alsuchmaner of people ben ledde by the deuyl in to hell where they haue a ryght sorofull guerdon/And ther is no wher so valyaunt a kynge ne so puyssaunt prynce/duke/erle/knyghte/or noble man to whom the deuyll hath regard but that he do to hym as moche greef to his power as to the moste vyle and moste pore that cometh in to helle/whan he hath so vsed hys dayes and dyf that he ys falle in his handes/For all they that ben dampned for to goo theder of what estate that they be.ben called rybauldis For he myght haue conquery'd in heuen more noble and more worthy realme than is in thys world/For who that in thys world seruyth our lord vnto the deth/he is more honoured in heuen than al the kynges that euer were in this world that so lytel endureth with vs/Nowe serue we hym than & leue we the euyll/the glore & the vanyte of thys world Syth thā that here to fore we haue deuysed how and wherfore god hathe created the world & wherfore he made man/we shall deuyse to you here after the fourme of the world and the facyon after that it cō teyneth & compriseth/and how it is made and compassed round a-bout/But it is expedyent that to fore this we speke of the.vii. artes lyberall and of theyre reasons.And how they were founde by thē that apperceyued the sciences and vertues/For by the.vii. Artes bē knowen the faytes of the world/And how it is set/ And therfor we ought now to speke therof for to vnderstād the better what we shal say here after.

¶wherfore and how the seuen Artes lyberall were foū-de and of they r ordre/ Capitulo .v.

Now declared this book which is drawen out of Astronomy howe somtyme the notable and wyse philosophers wold enquere of the maner of the world/and how it had bene created & made of god/where of moche people marueyled/ ¶And than whan the world was made and compassed/there was people ynoughe/of whiche many beheldе the firmament/that torned roun de about the worlde and meuyd they hadde greate marueyle how it might be made/ ¶And they waked and studied many nyghtes and many dayes/ Than began they to beholde the sterres that did ryse in the east/and meuyd aboute ouer theyr hedes Certaynly these philosophers apetyted not these grete mangeryes ne delycyous wynes ne sor to fylle theyr belyes as done bestys that seche nothyng but their pasture lyke as this day do they that retche of nothynge but to fyl their paunche wyth good wynes & good by tayles and after to haue a fayre bedde/whyte shetes/and softe/ And there to slepe as the swyne/but those were wakyng and studi eng many nyghtes and it greued not them/but they were embelyf shyd moche of that they sawe the fyrmament thus tourne and so nobly to holde hys cours and termes/Thus sawe they the sterres meue tyl they went down in the west/some on that one syde/& som on that other syde/And som sonner than the other/ Thus be held the prudent men philosophers & other about the fyrmament tyl it was day that they sawe the sonne shewe & reyse in the mor nynge rede and clere which ascended and mounted halfe the daye/ And that otherhalfe descended so longe tyl he went vnder which made the nyghte to approche/and than cam the sterres agayne in the nyghte in theyre cours tyll the sonne cam agaynste and enlu myned the daye/and helde hys waye and course styll/ tyll that he repayred on the morne in to his pryncypal place. After they beheldе the mone/whych was a comon thynge & appered to the worlde dy uersely. One tyme she was rounde .another tyme halfe.and after horned/& so went & becam suche as no man myght see her/And af ter she appered horned & syth half as she had ben tofore/and also rounde & full/Than knew they well by their entendement that she approched the sonne tyl she was euen agaynst hym. and after de parted/And after she withdrew her more and more tyll that she was vnder the sonne as she had ben tofore. And thenne shewēt and cam agayn euery nyght and tornynge and makynge her cours about the fyrmament eyght as she now doth with out ony thynge chaungyng the contrary/ But now as sayd is the people that ben

now thynke more/And ben moche more curyous of theyr greate & fatte paunches for to fylle and to make them fatte/by the whyche they come the soner to theyr ende and to carayn & by theyr ouer moche nourysshyng & bylaynous /which delyuereth them fro to trauayle and after to shame and dampnacyon/The auncyent fathers gouerned them not in this wyse/For they sette not by meate and dryncke/but for to taledge their hunger and thurste for to susteyne theyr bodies and to hold them in helth in such wyse as they myghte help them selfe by theyr wyttes/as they ought to do for to come to the glory of our lorde/And that tyme they lyued.xx.or.xxx.yeres longer than they do now/of an.C.one/And that procedeth of theyre folysshe and outrageous gouernaunce/Certaynly suche people vnderstande not wel the worde of god/that he sayd to the deuyl whā he cam to tempt hym and sayde that he shoulde make of the stones brede/ & that he shold eat/

Than Jhesu Cryste answered/that man lyued not onely by brede/but by the worde that procedeth frome the mouthe of our creatour/yf the men in these dayes vnderstande well this worde/they wolde retayn more gladly the doctrynes that procede and comfro the mouth of our creatour and maker/But the great rentes that they haue/and the great treasours of theyr coffres bē cause of shorynge and abredgynge of theyr dayes/by theyr dysordynat mangeries that ouermoch noye and grene them.so that nature may not wel bere ne sustayn/wherof they must nedes the soner rendre their soule and dye. Thus theyr rentes theyr tresours/or other thynges wherin they delyte them take away their lyf/theyr herte/and their wytte all attones. In suche wyse that whan deth cometh & muste nedes dye/they haue lost wytte and vnderstandyng/of whom many ben deed and dampned/whiche at theyr nede may not be counceyled ne can not helpe them selfe/whan they haue moste nede/they lyue not lyke them that for to kepe them fro perilles studyed i sciences and vsed theyr lyfe in suche maner that they wold but susteyn theyr bodyes only as long as they shold be in thys world.as they that well knew that this lyfe sholde not to them longe endure/and had enuye at none other thynge.but onely for to lerne suche scyence by whych they myght know the souerayne kynge almyghty that al hathe created of nought and made it with his handes / Than they thought in theyr entendement as people that was of noble and vertuous entencion that they sholde neuer haue knowledge of our lorde god/ne of so hye myght/ but yf they entended and serched in

his wo⁊kes which they foũde so excellent /And as great as they myght enquere & know /For men neuer knewe the mayst⁊e/but yf before men know parfytely his estate and what his wa⁊kes ben/ For by the wo⁊kis is the wo⁊keman knowen /and how he may be suche one/ And therfo⁊e the auncyent faders wold employe them & assay the wo⁊kes of our lo⁊de/ And fyrste for to haue knowledge of his power and his vertue/ Conscideryng that they myght not occupye them self in a more dygne ne wo⁊thy sc⁊yence ne more difficyle/ And whā the more that they knew of hys wo⁊kis and of his wisedome/ so moche more had they the better will to loue their creatour and mā ker/& to honour hym conscyderynge that he hadde made so noble a thynge and so wo⁊thy as is the heuen m which ben the sterres that shine bright therin /and his other marualous vertues which they p⁊eysed moche /For how moche more they p⁊eised hym so moche with good wylle they serued hym /For it was all their affeccyon/intencyon /and reason /to knowe god/for as moche as they knew certaynly that god had gyuen to them with nature wyt and reason for to serche and compryse of thynges of therthe/and of them of heuen as moche as they myght know /for otherwyse they might neuer haue thought it/ Thus a mā be he neuer so wise ne discret may neuer come for to vnderstād the hye secretz of god ne of his myracles/but by hym for by right he knoweth al/ Wt of thē that by nature be made and o⁊deyned in heuen and in erthe/ man may well enquere some reasons yf it be gyuen hym & that he be garnyshed of good quycke wytte/ And that be haue sette and employed his time to study and to lerne/and sythe they had gotten vndersta dynge & reason by their great studye/labour/and trauayle/so moche that they myghte compryse wherfo⁊e and howe all the wo⁊lde was made and compassed as ye haue hard heretofo⁊e/ So thought they than/that they myghte well knowe and haue reason of some thynges sithe they had the vnderstanding of hym that is almighty to knowe in partye o⁊ atte leste of suche as they myght se with their eyen/how wel that they were ferre/ Thus wolde they know the reason of that/that they sawe so meue the sterres of the fyrmament & of them that shone so clere/ Certaynely this was the p⁊yncypal cause why fyrst they put them to studye for to ēquere the sciēce that they knew not/And knewe well that they sholde enquere soner of thynges that they sawe than of them that they sawe not/ And therfo⁊e were they meuid for to know & to enquere the scyēce which they knewe not of that they had otte seen the fyrmament to meue &

wyll knowe the trouth/And sayde it was right good to knowe it/If it pleased god/and to knowe of hys natural worckes/for the more perfytely to beleue and knowe how he was god almighty/for men coude not knowe ne finde noresons of god but onely by his worckes/The good auncyent wyse men/which dylygently wolde understande thys mater/had no cure for to amasse none other goodys/but onely to lerne the pure scyence/they were not couetous/ne sette not to gader treasours/and there were plente of thē that apparceyued as wise mē that it was a great charge to them often tymes as well to kepe it/as to spend it by mesure as in other wayes to gette it and bringe it to gydder/And that all this was a lettyng to them for to lerne/And they delybery damonge them and concluded that some cast and threwe theyr treasour into the see/the other gaue it awaye and habandoned to them that wolde take it/and wēt as heremites And the other departed it to poore people/And other there were that lefte theyr good in suche wyse as them semed that they sholde haue lesse cause to thynke theron/and reteyned nothynge but onely for their vse/And held with them certayne folke to serue them to thēde only that they sholde entende to nothyng but to study and to lerne/They dyd do edyfye theyr houses fro the people lyke as relygeous people and sette them in such places that thyes or foure times the weke they myght assemble & come to gydre for to solace thē & sporte and there eche rendred his reason of that he had lerned and lerned And so longe dyd they thus tyll they had experymēted which was trew/and who knew most and that they had founde who had most greatest entendement/And hym they chose by consente of them all for mayster/And herecorded their reasons heryng all the felowys/& rehercede to them all to gyder that euery man had sayd/In this maner were the clergyes fyrst founden contynued and auaunced/and so moch trauailed & studied/that they knew by the help of our lorde of whom al science groweth and habounde th great prntye of that it is/But thys was not in lytyll tyme/for they were longe in study and vnderstode moche/And they that were fyrste/all that they vnderstode and knewe/they put it in wrytynge in the best wise that myghte/to the ende that they that sholde come after them and wolde entremete in connynge myghte haue theyr wrytynges and trauayle all wayes in the science as they hadde done before. All that they founde and sawe/they set in compilacions & did so moche eche in his time that they were more than .M. & .ccc. yere ere they by their labours & cōtinuel studyes had goten the .vii. artes or sciēces

liberal & put to gyder/but they held their labour well ēployed & the payne that they put therto/for they knewe by their wytte and by their clergy/al that was come on erthe by nature whan they wold sette their cure therō. And also were not abasshed whā a merueyllous case happed on heuē or on erth/for they cowld wel enquere the resō wherfore it was & sith that it happed by nature/And so loued god moch the more whā they saw such meruaillous werkis/& wat ched many nyghtes wyth ryght great ioye & great studye of thys that they had foūd so hie worky by which they amēded thē selfa gaīst our lorde that they knew the trouth. & lefte the vanite of this world/ that so litel is worth for to come to the ioy that neuer shal faile/Of whō plēte of wyse philosophers that were i the world dyed wrōg fully & without reson/bicause they shewed rightfully to the great lordes/& gaue thē fayr exāple i repreuing & mispreysig their euyl ty ránes and thertorciōs that they did to moche people/and pzeched to thē right & trouth. & they that wold not beleue thē & had shame of that they were of them blamed/they made them to be put in their pzisōs where they made thē to dye by greuous tourmētes by cause they shewed to them the trouth wherof they were certayn/lyke as was done to holy saites that suffred deth & passiō for the loue of iesu cryste whō they wold enhaunse/so were there philosophers that by their wyt & vnderstadig ppheciel the holy time of the cōmyng of Jhesu crist lyke as vyrgyle said which was in the tyme of Cesar at Rome/by which plente of people haue bē bett sith thā they were be fore/for he sayde that a newe lmage was mioed fro heuē on high that shold do vertues i erth by whō the deuil shold be ouer comen/ vpō which saint poul that saw this scrypture which he moch prey sed/said with a sorouful hert for so moch as he had not bē cristen/ Ha that I shold haue rēdryd & yeldē the to god/yf thou haddest ly ued/& that I had come to the/Other philosophers there were of whō euerich sayde goode wordes & meruellous. But we may not now reherce the good thigz that they said/for they were pzudēt & valiāt/sene that they set clergy to fore al other thiges/for yf it were not by clergy mē shold not know that god were/& yf they had not bē so prudēt mē as they were ther had neuer be so great clergy as is now. and yf there were now such as they were thā that founde fyrst clergye/It sholde be other wyse than it now is/But clergye goth now all to nought that almost it is perished/for in these daies the people seeth not by cause that they that oughte to vnderstande vertues and to teche other and geue exemple to do well they bene

they that recule and withdrawe fro̅ it/And al this p̄cedeth by their folye/For no man holdeth clergye for vertu.ne he loueth it not ne applyeth hit in al poyntes/but many there ben that sechen the lyes & dreggys/& leue the clere wyn/For no mā lerneth ne secheth now but for to conne so moche that he myght conquere and gette the money/And whan they haue goten & largely assembled therof/than ben they worse than they were before/For the money hath so surprised them that they may entende to none other thynge. Ther ben plēte of pore clerkes that gladly wolde lerne yf they had the power/ But they may not entende therto .by cause they haue not wherof for to furnisshe them of their necessytees as well for to haue bookꝭ as meat drynk and clothes/ But ben constrained for to gette their lyuyng other wyse/for the ryche haue now in these dayes sealed so moche/that the pore abyde naked and must suffre/yet ben there plente of ryche clerkes that haue bookes wythout nombre of one & other rychely adoubed and couered to the ende that they ben holdē for wyse & good clerkꝭ/For they seche to haue nomore.but only the loos and preysynge of the people/ And do in lyke wyse as the cocke that scrapeth in the duste for to synde pasture he scrapeth so longe in the duste & muche tyl he synde a gemme ryche and precyous which shyneth clere/then he begynneth to loke theron & beholdeth it/and doth no more but late it lye/For he demaundeth not after the ouche or gemme/but had leuer haue some corne to eat/In lyke wyse it is of many of these not wyse clerkys couetous that haue the precyous bokes richely lymned storied & well adoubed/that do nothyng but loke & beholde them without forth whyle they be newe by cause them seme that they be fayr/and so they behold them gladly & passe therwith/& after they torne on that other syde & thynke for to fylle their bellyes/and to come to their folisshe desyres/& they myght lerne ynoughe yf they wold entende it/For they haue well the power & might do as the wise men dyde herto fore/the which by their trauayl/study/& dylygēce/fou̅d first the clergyes/but they haue their entendemēt folysshe & out of the way/And therfore the sciences & artes perysshe in suche wyse that with greate payne they knowe their partes of reason which is first booke of Gramayre.the which is the first of the.vii.sciēces/ But put their artes in their males/& go lerne anon the lawes or decretals/& become aduocates & iurates for to amasse & gadre alway money wher i the deuil cōforteth hi/and yet doo they not so moche for to lerne/as they doo for to fylle their purses/In Parys/ Cambrydge and/Oxenford/is there suche

maner of clerkys that bene acustomed to wyll haue the renowme and fame to be called mayſters for to be the more preyſed and honored / ¶ And haue leuer to conne lytell and to haue the name of mayſtre than they ſhold be good clerkes wythout hauyng the degree & name of mayſter / But they be called maſters wrongfully / For ba nyte mayſtreth them in ſuche wyſe that they can but lytyl trouthe bycauſe that they haue ſo lone the name of mayſtre they leue the clergye / ¶ And take them to the wynnyng / lyke as marchauntes do and brokers. And in this wiſe ben many in the world that haue the name of mayſtre that know right lytyl of good and reaſon / For they that now deſyre this be not mayſters after ryght / for they ordeyne thē other wyſe to the ſciences than they dide that fonde them fyrſt. ¶ They entred fyrſt in to Gramayre for to drawe reaſon in their ordynaūce / & after Logycke for to preue & ſhew the trouth fro the falſe. After they foūde Rethoricke for to ſpeke fayr in iugemēt & ryght whiche they moche loued. and after Arſmetricke for to be expert in all thynges. After they fonde Geometrie for to meſure and compaſſe al mayntry and after they founde the ſcyence of Muſycke for to ſette al thyngꝭ i cōcordaūce / after they had the vnderſtādyng of Aſtronomye / for ther by were they meuyd to haue ſcyence and vertue. In thys maner ye may vnderſtande how they that fyrſte founde ſcyence ordeyned the. vii. Artes or. vii. Scyences / & they be in ſuch wyſe entrelaced that they may not be auctoryſed that one wythout that other ne entierly preyſed. And alſo the firſt may not be parfytely conned without the laſte / ne the laſte without the fyrſt and he that wyll lerne one ryght and vnderſtonde it hym behoueth to lerne all the other / For otherwyſe may not be knowē expertly the certayn / ne the incertayn / For that one is ſo conune to that other that it behoueth to know of al / but now men ſeche to lerne no more but the arte for to gete the moneye. and ben to blame of that the other were preyſed that fyrſt ſo trauailed of which it is to vs ſo great nede / For lytyl ſhold we haue knowen yf we had not ſeen it by wrytynge / For as it is tofore ſayde / yt clergye had be loſte we had knowen nothyng / ne who had ben god / ne men ſholde neuer haue knowen what thynge had ben beſt to do / and ſo ſhoulde al the world haue ben dampned then had we ben born in an euyll houre For the men had knowen no more than dombe beeſtis / And all the good thynges ben now knowen & al comen of the. vii. ſcyences that the phyloſophers founde ſomtyme by theyre wyttes / For therby hadde they vnderſtandyng to loue god and hys vertues /

And that god is alway and ſhall be wythonten ende. and ſo beleued they in great faythe truly in the auncyent lawe / But in theſe dayes the ſcyences perysſhe by our enuyes detractions and other euylles in ſuche wyſe that lytell is retayned of one and other / for now dare no man entende but for rycheſſe. For myſſayers / felons / & enuyous men that wyl lerne no good / and yf they ſe any entende to ſciences and clergyes and they be not riche & myghty for to furnyſſh them / the ryche men wyl anon mocke them and ſcorne them / & thus wyl the deuil exhort them that is theyr mayſter & theyr lord to whom it pleſeth that they myſſaye in ſo moche as he ſhal reward them wyth great hyre that they ſhal be ſure to haue al euyl aduentures in hell that ſtynkyth where they ſhal mocke them ſelfe & ſhall ſay that they were borne in an euyl hour / whā they haue not lerned that they ought to lerne / there ſhal they haue more profyt of theyr ſcyences that loued better to conquere clergy / than the fool to conne knowe to aſſemble the greate treſours and the greate richeſſe / and knowe ye that al they that for to gete wordely goodys leſte theyr tyme for to lerne good / ben al aſſured to haue euyll and payne after theyr deth for by theyr auarice and cheuaunce the ſcience come to nought ſo that almoſt they ben peryſſhed / & that which now is knowen cometh and groweth of the vnyuerſites of parys / cambrydge and oxenford & other. &c.

¶ Of thre maner of people & how clergye cam fyrſt in to the realme of Fraunce /

Capitulo vi.

Now regneth clergye moche ſtrongely in Fraunce in the cyte of Paris as ſomtyme was in the cyte of Athenes whiche thenne was moche noble & puyſſaunt / The phyloſophers that than were / and whiche that ought to teche & lerne other / accompted but thre maner of people in the worlde after theyr vnderſtandynge / and that were clerks / knyghtes & labourers. The labourers ought to purueye for the clerkys & knyghtes ſuche thynges as were nedefull for them to lyue by in the worlde honeſtly / and the knyghtes ought to defende the clerkys & the labourers that ther were done no

wronge to them/and the clerkes ought to enseygne and teche these two maner of people and to adresse them in theyr werkes in such maner that none do thynge that sholde displease god/Thus somtyme the wyse philosophers dyd sette thre maner of people in the worlde as they that knewe that no man myghte sette his courage in that he myghte be wyse a ryghte in two maners or thre/for it happeth neuer day of the worlde that clergye/chyualry/and labourers of the erthe myghte be well knowen by one onely man in all his lyfe/therfore he that wolde lerne/it behoueth hym onely to lerne one of the thre/and therfore the philosophers dyd sette thre maner of people without more in the erthe/for they wolde seche the very trouthe/& sought a cytye in the worlde where they myght beste be and dwelfor to enquyre the estate of the clergye/and thus the better for to adresse them and to teche other/they chose the cyte of Athenes which was noble and somtyme one where they had theyr comon recydence & assemble/ & fro thens to Rome/and fro thens in to Fraunce/where chyualrye hathe as greate power as in ony other place of the worlde/and thus haboundeth there that one and that other/for chyualrye seweth alway clergye/ ¶Than the noble kynges of Englond and of Fraunce may be ioyous that there is in theyr Realmes suche seygnourye as is science of clergye where euery man maye drawe oute cōynge/for it is as a fontayn that cōtynually soundeth and spryngeth/& the more it renneth & the ferther/the more it is holsom/¶In lyke wyse may I say to you that Parys/Cambrydge/& Orenforde/ben the fontayns where men may draw out moste scyence and clergy/¶And syth it is so that clergy is so moche auaunced in the moste parte of all crysten regyons/Than ought we to knowe by reason yf that the ayres of noble prynces do knowe it/ ¶Forlothe as the sonne is moste fayre of all the sterres/& causeth moste good thynges to growe in the worlde by the bounty that haboundeth in hym/so oughte a pryncē or a kynge to be of more valewe than an other/and haue more vnderstandynge in clergye than another/

¶And therfore I wyll speke of the vii. scyences whiche ought not to be forgoten/

Gramer is the fyrste and pryncypall grounde and foundement of euery scyence because that no man is able to lerne no maner of scyence/but outher it muste be by redynge of bokys or by the herynge of other men which shal speke to hym and lerne hym. ¶ And for because that gramer stãdeth pryncypally in two poyntes ¶ The fyrste is wrytynge whiche is called Ortografy/and the other is speche which is called prosody ¶ Therfore I may well conclude that gramer is the fyrste grounde of euery science/For there is no perfyte ne sure meanes how a man shall declare to another his mynde but by wrytynge or els by speche ¶ But fyrste I say that ye muste consydre that gramer techyth not onely how the latyn tonge sholde be trewly wrytyn and spoken but it techyth how euery other tonge shoulde be wrytyn truely and spoken congruly/

¶ Trewe wrytynge and cõgrue speche is that that is wrytyn and spokẽ after the moste vsuel maner of the people which vse that speche for there is no tonge nor neuer was but it dothe and dyd begynne and is made perfyte by the comyn vse of the people so that the grebe tonge/laten tonge/and euery other tonge was euer more longe before ther was any gramer made for the same tonge/And whan any suche tonge was perfytely had and vsyd amonge any people/thã other people not vsed to the same tõge caused rulys to be made whet by they myght lerne the same tonge all thoughe they neuer inhabyted nor came in that tõtrey among the people where that tonge was moste vsed/and suche rulys be called the gramer of that tonge/

¶ And so there is two wayes to lerne to wryte truely and to spebe any tonge congrue One is to be conuersant dayly with the people which spekeit wel and perfytely. ¶ And another is to lerne the grãmer rulys made for the same tonge/But yet there be many tonges now a dayes meruelously chaũged other wyse than they were vsed fyue hondred yere agone/for we Englisshe men at this day/spebe not the same tonge that was spoken fyue hondred yere agoo/ne wryte all the same lettres/nor we be nat able now to vnderstand that Englysshe that was than spoken/nor we be scaunte able to know the lettres nor to rede the bokes/& Frenche men/Spanyardes/Italyans/& Almayns/be eyn in the same cale/ ¶ And the cause therof is for that they be but vulgare tonges/not kepte with a grãmer/But the tonges whiche haue bene preserued and taught by any gramer and wrytyn in bokes kepe the same maner of wordes and lettres as were vsed whan the grãmer of the same tonge was fyrste made/

¶ Also in gr̃mer be.iii.partes/that is to say Artography & prosedy/ Artography is but to know how one holde wryte truely euery worde & sentence as it is moste comonly vsed/

¶ Also as touchig prosedy lyke wyse as there is.viii.ptes of speche in the laten tonge and al other tonges/so there is.viii.partes of reason in the englisshe tonge/That is to say. Nowne/Pronowne/Uerbe/ Pertycyple/Aduerbe/Conunctyon/prepositcion/& Interiectyon/

¶ A nowne is that thynge which may be sene/felte/herde/or vnderstand/or that berith the name of a thyng/as a hous/a man/goodes/ & such other/& these be called nownes substantyues/for that they may be vnderstand by them selfe without any other worde addyd to them/But nowne adiectyues be they that can not stande by them self in no reason without a substantyf ioyned with them/as white/ black/good/or badde which make no reasō perfite by thē self/except I say/a whyte house/or a blacke hous/a good mā or a badde man.

¶ A pronoū is moche lyke a nown & in reasō standeth for a nown and there be of them but a certayne in the worlde/as appereth in the donet for the latyn tonge/ ¶ And in englysshe here folowith all/as I/thou/he/we/ye/they/thy/his/or your/their/this/that/& which.

¶ A verbe is a pte of speche which cōmeth i euery reason and it betokenyth the doyng of a thyng or the suffering of a thyng/as thys wordes/loue/louyd/be verbes/for I may say. I loue.or I am louyd/

¶ A pertycyple is a parte of speche determyned of the verbe/& hathe a signifycacyon moche lyke the verbe that he cometh of/

¶ An aduerbe is a parte of speche which accōpanieth the verbe & declareth the maner and circumstaunce of the doyng or sufferynge of the verbe/

¶ A conūccyon is a parte of speche whych bindeth wordes and sentence to gidyre/ ¶ A prepolicion is a parte of speche put before other wordes or ioyned wyth the wordes or sentred fro hym ¶ An interiection is a part of speche & but a sowne betokenynge the affeccion of the mynde/

¶ Retorike. Cap. viii.

Ethoryke is a feyrence to cause another man by speche or by wrytynge to beleue or to do that thynge whyche thou
R wolldest he.ue hym for to do/ To the which thou must fyrst deuyse some wey to make thy herers glad & wel wyllyng to here. The which thynge to bryngе to passe thou must deuyse dyuers weys/ The fyrst is that thou ymagyne hym some meruelous thynge/ or some other strange thyng/ or some thyng touchyng hym self or some thyng touchyng his kyndes or his enemyes/

¶ Also whan thou haste made hym gladde to here the/ thou must take hede that in the matter which thou shewest thou must vse .v. maner thynges/ The fyrst is .inuēcio/ as to ymagyn the mater which thou intendest to shewe/ which must be of trewe thyng/ or lyke to be trewe & to note wel how many thynges in that mat ought to be spoken/

¶ The .ii. thynge is disposicion/ which is to shewe euery thyng of thy mat in ordre/ as whan thou haste inuētyd & appoynted in thy mynd how many thyng/ thou wylte speke of/ than thou must dyspose euery thyng in ordre & which mat shalbe fyrst spoken & whiche shalbe last/

¶ The thyrd thyng is eloquēcis/ as whā thou haste disposed how euery poynt & mat shalbe shewed in ordre than thou must vtt it with fayre eloquēt wordes/ and not to vse many curyous termes/ for suptilnyte in euery thyng is to be dyspraysed/ And it hyndreth the sentēce. And whan a man delatith his mat to long or that he vtt the effecte of his sentence though it be neuer so well vttered it shalbe tedyous vnto the herers for euery mā naturally that heretha nother/ desyrethmoste to know the effecte of his reason that telly th the tale/ as the philosopher seith/ omis homo naturalit scire desiderat/ Therfor the pryncypall poynt of eloquens restyth euer in the quycke sentence/ And therfore the last poynt belongyng to Retherike is to take hede that the tale be quycke & sentencious/

¶ Ars memoratiua/ Or memory/

¶ The fourth thynge is memory. as whan thou haste dysposed how thou shalt elygantly vtter thy mater/ Than thou must deuyse a way to kepe it in thy mynde for fere of oblyuion whan thou sholdest pronounce it/ which mememory standeth in .ii. thynges/ that is to say memory naturall/ & memory artyficyall/ memory naturall/ is that which god hath gyuen to euery man/

¶ Memory Artyficyall is that which mencal Ars memoratiua/ The cratte of memory/ by which craft thou mayste wryte a thynge in thy mynde/ & set it in thy mynde as eydētly as thou mayst rede

and se the wordes wbych thou wrytest with ynke vpon parchemēt or paper/ Therfore in this arte of memory thou muste haue places which shal be to the lyke as it were perchement or paper to wryte vpon/ Also in stede of thy lettres thou must ymagyn Images to set in the same places/ Therfore fyrst thou shalt chose thy places fyrste As in some greate hous that thou knowest well/ and begyn at a certayn place of that hous/ & marke som poste/ corner/ or wall/ beynge. there as they stande arow/ and within .x. or .xii. fote and not past .xx fote a sōder marke som other poste or wall/ /and so alway procedyng forthe one way tyll thou haue marked or notyd .C. or .C C. places/ or as many as thou canste haue/

¶ Also in this crafte as I sayde before thou must haue euer ymagy of corporall thynges that thou muste se with thyn eye whyche thou muste ymagyn in thy mynde that thou seest them sette in the places ¶ And so of euery corporall thynge thou muste ymagyn that thou seest the same comporall thyng in the place/ ¶ As whan thou wylte remembre a man/ a horse/ a byrde/ a fyllye/ or suche other to Imagyn that thou seest the same man/ hors/ byrde/ or fyllye/ in thy place and so of euery corporall thyng/ But yf thou canst not haue a corporall ymage of the same thynge/ as yf thou woldest remembre a thynge wbych is of it selfe no bodely nor corporall thyng but incorporall/ Thā thou muste yet take an ymage therfore that is a corporall thynge/ As yf thou woldest remēber thys word /torede/ than thou maist ymagyn one lokynge on a boke/ or for this worde. walk/ to ymagin a payre of legges/ or for this worde wyfedome an olde man wyth a whyte hed so that euery ymage must be a bodely & a corporal thyng. ¶ The fyfte thynge is pronūciacyō which is but to modder and to order thy voyce & thy body acordynge to the wordes & to the sentēce/

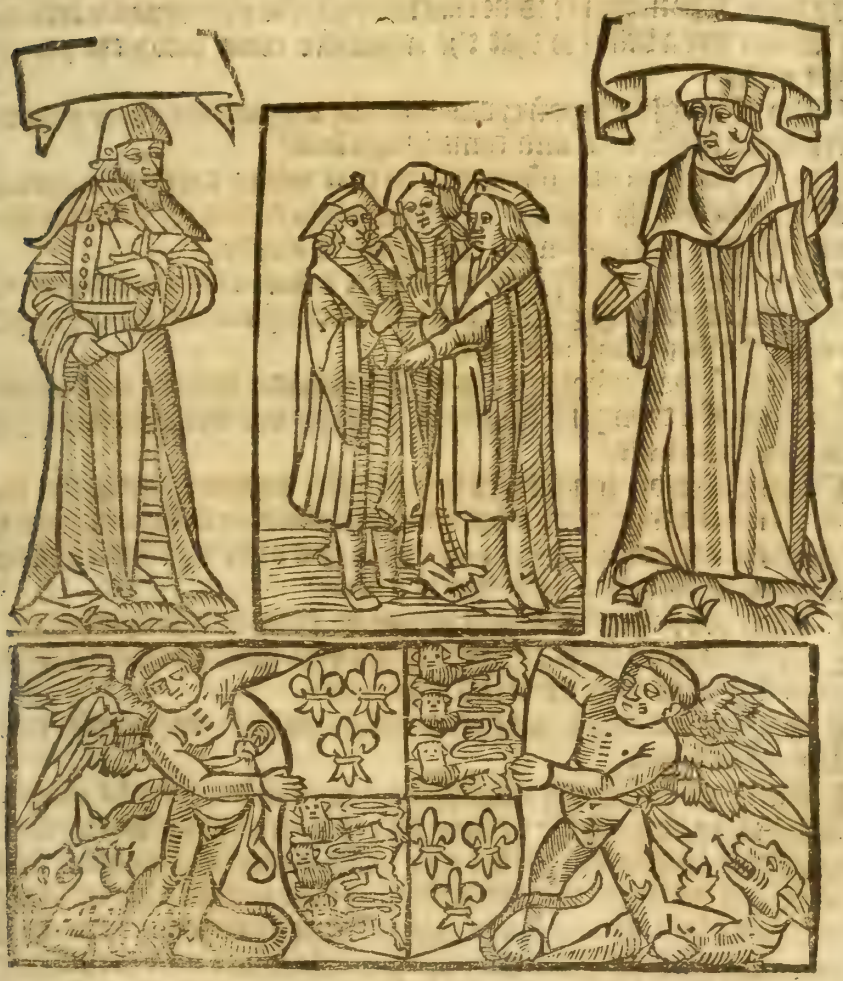
¶ The voyce must haue strength/ clearnes/ & temperaunce.

¶ Countenaunce is the orderynge of thy face/ as whan thou spekyst of a mery mater to shew a laughyng and mery countenaunce/ ¶ And whan thou spekyst of a pytefull mater to shew a lamentable countenaunce & a heuy/ ¶ And whan thou spekest of a weyghty cause or mater to shewe a sad and a solempne countenaunce

¶ Gesture is not only in extendyng one parte of the body but euery outward mēber of the body/ as in hede/ armes/ & leggs/ & other vtt partes/ Therfore to euery mater that thou shalt vtt thou must haue conuenyēt gesture/ as wha thou spekest of a solēpne mat to stande vp ryghte with lytell meuynge of thy body/ but poyntynge it with thy fore fynger/ ¶ And whan thou spekyst of any cruell mater or

prefull cause to bende thy fyst & shake thyn arme/And whan thou spekyst of any heuenly or godly thynges to loke vp & pointe towarde the skye with thy finger/And whā thou spekest of any gentilnes/ mylденes/or humylyte/to ley thy handes vpon thy brette/& whā thou spekest of any holy mater or deuocyon to holde vp thy handes/

Here after foloweth of Logyke. Ca. ix.



Logyke is the ſcyence wherby men do lerne to know the trouthe from the falſe ſuerly & truly by probable argumen tys/ and forto knowe the trouthe and the falſhed of euery propoſycyon/ ¶A propoſycyon is a reaſon of the indicatyff or ſhewyng mode congrue and perfyte/ ſygnyfyenge trouthe or falſe/ as god is beyng/ a man is a beſte/ and a horſe is ren nynge/ and ſuche other/

¶Alſo euery ſynguler propoſycyon is an affyrmatyff or a negatyff/ The affyrmatyff is he that affyrmeth the pryncypal verbe/ As a mā is a beſte/ The negatyfe is he that denyeth the pryncypall verbe/ as a man is not a beſte/ ſo that the negatyffe come before the pryncy pall verbe/

¶Alſo of ſyngle propoſycyons/ ſome be vnyuerſals/ ſome partycu lers/ ſome indiffinite/ and ſome ſyngulers/

¶An vnyuerſall propoſycyon is he that whan a nowne appella tyff that beryth the name of a thynge is his ſubiectyfe determynyd with a ſygne vnyuerſall/ as euery man is a beſte.

¶A partycular propoſycyon is he that whan a nowne that bereth the name of a thyng is his ſubiectyfe determyned with a ſygne per tycular/ as ſome man is a beſte/

¶A propoſycyon indyfynyte is he that whan a nowne that beryth the name of a thynge is ſubiectyfe determyned without any ſygne as a man is a beſte/

¶A propoſycyon ſynguler is he that whā a nowne that is the pro per name of a thynge or a pronowne or aduerbe demonſtratyfe is ſubiectyfe/ as Johñ is a man/ wyllam is a beſte/ this man rēneth/ he ronneth/ there is a beſte/ here is a man/

¶Alſo of propoſycyons ſom be modalis & ſom be eſſencyallys.

¶A propoſycyon modall is he that hath his ſubiectyfe with a ſygne modall/ as this/ poſſyble it is a man to go/

¶Sygnes modals be .iii. that is to ſay/ poſſyble/ impoſſyble/ neceſ ſarye/ contyngent/

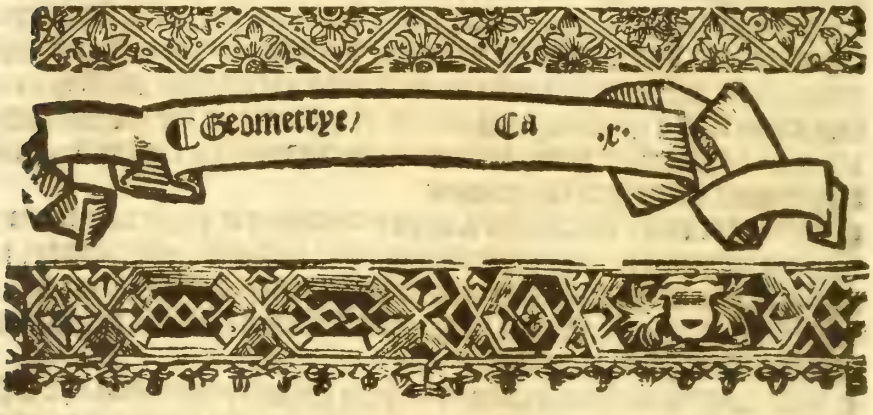
¶Alſo of propoſycyons impoſſyble and neceſſary there be twayne that is to ſay/ impoſſyble by hym ſelfe/ and impoſſyble by accydent/ impoſſyble by hym ſelfe is that euer was fals/ is falſe/ and euer ſhall be fals/ as no god is/ impoſſyble by accydent is that/ that is fals & euer ſhal be falſe/ but yet ones it myght haue be or was trewe/ as I haue not be lluyng. Neceſſary by hym ſelfe in like wiſe is that/ that euer was trewe/ is trewe/ and euer ſhall be trew as god is/ Neceſſa ry by accedent/ is that that is trew and euer ſhalbe trew but yet

ones it myght haue be or was fals/as my father hath begotte me/
¶ Contyngent is that that may be trewe or fals indyfferently/as I go/I speke/I shall go/I shall speke/
¶ Also a double prepoſycyon is called an ypotytyk which hathe .ii. prepoſycyons includyd in hym with ſome conunctyon/As with & /yf/or/& whyle/& /whan they be ioyned with this worde & /they be called compplatyues/as thou arte arte a man/& that thou arte a beſte/and with this worde/yf/cauſels/as yf I ronne/A man ron nyth and with this worde/or/dyſſunytyfes/As I go/or thou goeſt/ & with this worde/whyle/tempozell/as while I go thou ſytteſt/
¶ An argument is the reaſon of a doubtfull thynge ſhewyng that whyche is ddoubtfull to be trewe or falſe/ as Johñ is a man/ergo Johñ is a beſte/So euer ye muſte note all that cometh befoze this wozde /ergo is callyd the antecedens & that whiche folowyeth thys wozde ergo is called the conſequens/And note this euer foz a pryn cypall rule to knowe a good argument/when by no caſe poſſyble that can be putte the antecedens may be trewe and the conſequens fals/than it is a good argument/but yf any caſe in the wozlde poſſy ble may be put that the antecedens maye be trewe & the conſequens fals/than it is no good argument
¶ Alſo other rules there be in Logyke to knowe a good argumente whyche foz yong lerners is cõuenient to be had and to be vſed foz to quyckyn theyre wyttes but this foz ſayde rule foz them that haue wytte and good capaſyte is ſuffycyent to knowe euery argument whether it be good or badde/
¶ Alſo Logyke techeth a man to knowe the dyffynicyon or the diſ= crypcyon of euery thyng which is no moze in effect but rules wher by to know truly what the thyng is/
¶ A dyffynycyon is that which ſheweth what the thyng is by other thyngꝭ eſſencyal/
¶ A dyſcrypcion is that whych ſheweth what the thyng is by other thynges accydentall/ ¶ As the dyffynycyon of a man is thys/ ¶ A man is a body wyth lyfe ſenſyble and reſona= ble foz euery thynge whiche is a body with lyfe ſenſyble & reaſona ble is a man /and euery man is a body wyth lyffe ſenſyble and rea= ſonable/
¶ Senſyble is as moche to ſay as that thynge that hathe the vſe or aptnes of the .v. ſenſys/as of taſtynge/ſmellynge/herynge/ſeyng/ & touchyng/
¶ A dyſcrypcyon is to know what the thynge is by thynges accyde

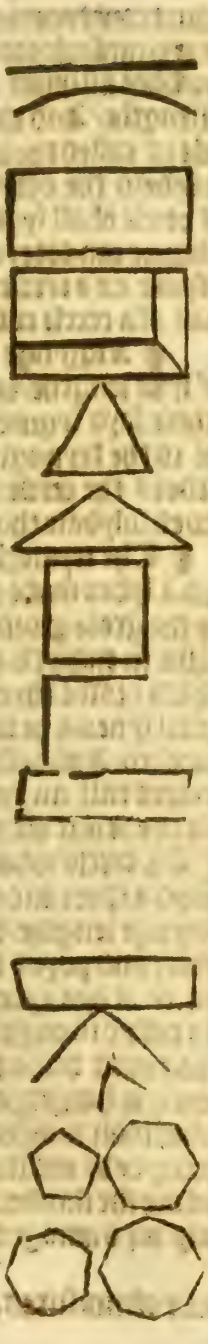
tall/as the dyscrypcyon of a boke comonly is that thynge that is made with perchement or paper or with lettres that men may rede yet euery thynge whiche is made with parchemente or paper with leters that men may rede is not a boke/nor euery boke is not made with parchemēt or paper and lettres as a boke made with tables and ymages/ ¶Therfore in the dyscrypcyon we saye this worde comonly.

¶Accydentall thynges be those that may be somtyme taken away from the thynge and yet the thynge to remayne as whytnes/blacknes/greatnes/or smalnes.

¶Essencyall thynges be those which neuer may be taken away fro the thynge and the thynge to remayne/as the bodye of a man can neuer be taken away from the man and the man to remayn/



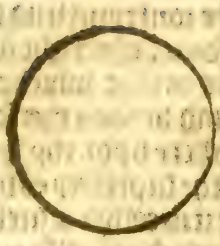
Gometry is the scyence to trye euery thynge by weight & measure/For without geometry no corporal thynge can be perfyte & truly made & wrought/And because euery suche thyng must be tried by weight & mesure/it is fyrst necessary to know the names of the fygures belongyng to Geometrye/and also to knowe the standerde of the weyghtes & measures by the which men vse to wey & to mesure euery corporall thynge of what fygure so euer it be/It is pryncypally to be noted that there be dyuers and many fygures whiche I shall not only declare them to you by mouthe but I shall shewe them to you in pyc ture/wherby you shal the better perceyue them/



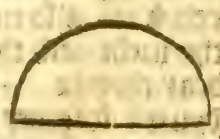
¶ A lyne is that whiche conteyneth no thynge but lengthe and of lines some be streyght and some be croked/ ¶ Superfycyes is that which conteineth no thyng but lengthe and brede & therfor the ouer part of euery thynge where vpon thy syght resteth and buttyth ys called the superfycyes in the latin tonge/and in englysshe it is callyd a surfyghte/for it conteyneth no maner thyknes/also euery thyng which conteyneth lengthe/brede/and thyckes/is called a body or a corpocall thynge

¶ Of fygures there be dyuerse/for euery bodely thinge hath a fygure or a facyon by yt self/some/ is of one fygure/and some of another/ ¶ A tryangle hathe .iii. diuerse corners/and one tryãgle is callyd therygħte or a parfyte tryangle/for that it is made of .iii./lynes/euery on of on length/& euery one of his corners be of one bygnes/

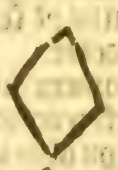
¶ A tryangle imperfyt is made of .iii. lynes of dyuerse lengths/and therfor the corners be not lyke of bygnes. ¶ A quadrate hath .iiii. corners/for it is made of .iiii. lines & euery one of a lẽgth & euery corner is like eother i bignes/& be called pfit corners or ãgle. ¶ Also there is another figure called a poullogeam/because that al hys .iiii. corners be lyke/but yet the two lynes of the sydes ben of one lengthe/and two of another/and the laten men call it perozyllogãmus (id est pari distantes) that is because the lynes ben of equall dystance on from another in euery place/and called in greke tetragon/and therfor in englysshe it is called a square perfet/and if the one syde be lõger than the other than it ys called a square imperfyte/bycause it hathe .iiii. perfyte angles & .ii. imperftriangles/also of the .iiii. ymperfet angles/one is called a great corner or angle/bycause it is bygger than the pfyt corner/the other is called a smal corner or angle be cause it is smaller than a parfyte corner/there be other fygurz made of like nes of lyke lẽgth/som with .v. ãgles called pẽtogon zsõ with .vi. ãgles called exagonz/so of vii. ãgles called eptogõs/& so of .viii. ãgles called octogons.

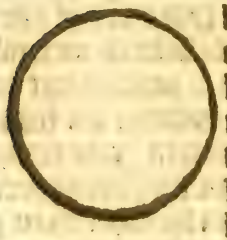


Center./ a cercle



diameter. a semicercle.





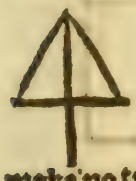
¶ A cercle is a playn fygure conteynynge a croked lyne / which is called his cyrcumferẽce to the which from the poynte in the myddes all lynes to that cyrcumference be of equall lengthe / And that poynte in the myddle of the cercle is called the center / Also the lengthe fro the on syde to the other is callyd the dyameter / and thys cercle of all fygures is called moste capar / for no figure can cõteyn so moche in so lytel cyrcumferẽce a space as a cercle doth ¶ A semycycle is the one half of a cercle cut and deuyded ryght in the myddes / ¶ A loſynge is a fygure whych hath .iiii. lynes of lyke lengthe / but no rygyt angles / ¶ Also of theſe ſayd fygures there be thre of thẽ very pfyt / one is the tryangle / Another is the quadrate / the thyrde is the cercle / and theſe ſeyd fygurs may be as well ſolydate that is to ſay thycke as playn / ¶ The tryangle whan he hath full thyckenes hath .iiii. ſydes made of .vi. equal lynes and he is called by the greke geometryc yons tetracedrõ And ſom call him in engliſh a calthrop / The quadrat whan he hath hys full thyckenes hath vi. ſydes made of xii. equall lynes and he is callyd by greke geometricians exacedrõ / And callyd in engliſhe a dyce / As the carpenters call an ynche of tymber or a tote of tymber whyche be but after the ſorme or facyon of a dyce / ¶ The cercle whan he hathe hys full thyckenes is callyd a ſpere and is a fygure rounde and hole conteynynge lengthe / brede / and thyckenes from whos center and poynt in the myddys all lynes to euery parte of hys cyrcumference be of equall lẽgthe / and is callyd in engliſhe a boull or a bal / Furthermore thou muſt vnderſtande that euery corporall thyng beyng or hauyng any of thys ſayd fygures or facyon that thou woldeſt knowe or trye muſt be tryed and prouyde by meſures / therfor it is moſt neceſſary to declare the ſtanderd of the meſures whyche is commenly vſyd amõge the people /

¶ The ſtanderde of meaſures.

¶ It is to be noted that iii. barley cornes drye and rounde make an ynche/ and .xii. ynches make a fote/ and therfore make a yarde/ and v. yarde and a halfe make a perche/ and .cl. perche in length and .iiii. in brede make an acre of land/ Also .v. fote is a pase/ for comonly whā a man renneth faste/ euery one of his pases is fyue fote/ & .M. pasys is a myle after the maner here vsydin englonde/

¶ The standerde of weyght.

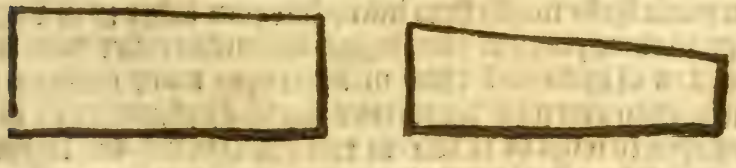
¶ Also .xxvii. whete cornys drye and taken in the myddys of the ere way a peny weyght called a sterlynge/ and .xx. sterlynges make an ounce/ and twelue ounces do make a pounde troy and .viii. pounde make a gallon of wine/ and .viii. of those gallons filled with whete make a busshell of london which is the .viii. parte of a quarter/



¶ To make a trewe quadrate or squyar.

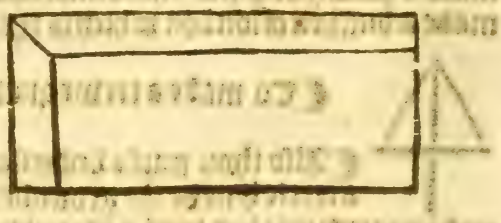
¶ Also thou muste vnderstande that a streyght lyne and a cercle lyne be the grounde of all measures/ and thou cāst make no tryangle but with a streyght lyne/ & therfore note wel that iii. streyght lynes leyde togyder do make a iuste tryangle but yt thou wylt make an instrument a iust quadrate thou muste do thus/ fyrste make a trewe tryangle/ and than deuyde me that triangle iust in the myddes with a streyght lyne & than thou hast a pariyt angle/ Thā fro that perfyte angle drawe .ii. streight lynes of a length/ & thā thou shalt haue an halfe quadrate (which amonge carpenters is callydin englysshe a squyer/ and by this forsayd way thou must trye thy squyar & make hym trewe/ & with suche an instrument callid a true squyar thou mayst make euery thynge that thou wylt quadrant & squa re (as carpenters vse to do)

To measure borde.



¶ yf you will lern to mesure borde whether your bord be asbrode at the one ynde as at the other/or not/yet ye must mesure the brede of your borde yn the myddys/and marke how many ynches yt ys of brede/& if it be more than.xii.ynches brode/by one ynche.ii.ynches/iii.ynches or.iiii.ynches ye muste adde to euery fote of lengthe as many of those ynches tyll ye come to.xii.and than marke that for an other fote/as by exemple yf your borde be.viii.fote long &.xb. fote in brede/fyrst marke the.viii.fote/and than take your fote rule & reken for euery fote.iii.ynches tyll you come to.xii.ynches & you shall fynde them.iiii.tymes.xii.ynches/whiche commyth to two fote/and than doth your borde conteyn iust.xx fote/

¶ To measure tymbre.



¶ fyrste you muste know that a pece of tymbre of.bi.square.& of an ynche square euery way after the facyon of a dyse ys called an inche of tymbre/and.xii.of those ynches of tymbre leyde to gyddre a lēgth/do make an ynche of borde/and.xii.of those ynches of borde do make a fote of borde/which is called planche borde/whiche planche borde shulde be(as carpenters vse) an ynche of thyknes/

¶ Also.xii.fote of borde layde vpon an other do make a fote of tymbre/and so a fote of borde conteyneth a.C.and.xliii.ynches of tymbre/& a fote of tymbre dothe conteyn a.M.viii.C.xxviii. ynches of tymbre/Therfor yf ye wyll mesure a logge of tymber, truly you muste fyrste marke how many fote your logge is in lengthe/than go to the myddes of your logge/and mesure ther how many ynches it is of brede/and than measure how many ynches it is of thyknes/than you must worke thys wyse/As yf your logge of tymbre conteyne in lengthe.xx.fote/in brede.xvi.ynches/and in thyckues xb.ynches.Than fyrst marke vp.xx.fote of tymber for your length/and than ye haue in euery fote of the brede/more by.iii.fote of borde/

than ye haue of the thycknes for euery fote .iii. fote of borde and adde them to gyder/ & than ye haue .vii. fote of borde/ than yet ye haue an angle lefte vnmeasured in euery fote which conteyneth .iii. ynches of borde one way/ & .iiii. ynches of borde a nother wey/ so that that angle cõteyneth thre tymes .iii. ynches of borde/ which two multyplyed to gydder make .xii. ynchys which is one fote of borde/ than adde those forsayde .vii. fote of borde to the one fote of borde/ and that maketh viii fote of borde/ so that euery fote of your logge in lengthe conteyneth one fote of tymbre and .viii. fote of borde/ which is a fote and a halfe of tymbre/ & two fote of borde/ so euery fote of your logge conteyneth a fote & an halfe of tymber & .ii. fote of borde/ so your logge cõteineth first .xxx. fote of tymber/ & .xl. fote of borde which .xl. is .iii. fote of tymbre/ & .iiii. fote of borde/ so your logge conteineth clerly xxxii. fote of tymber and .iii. fote of borde/

¶ Also if ye wyll know what a fote of your logge conteineth a shorter way by the scyence of Algorysme/ than ye muste worke thus/ multeply .15. by .16. and the nombre multyplyed wyll come to .240. so a fote of your logge conteineth .240. ynches of borde than deuide that by .12. & it wyll com to .20. so a fote of your logge cõteyneth .20. fote of borde/ which is a fote and a halfe of tymbre/ and .v. fote of borde accordynge to the furst reckennynge/

Arsmetrike is the science wherby mē maye lerne to reken & to account all nombres/ for wythout nombre and proporcyon no thynge can be well knowen nor wrought/ and thys scyens is necessary for Geometrye/ Mulyk/ and Astronomy/ And this scyēce of Arsmetryke whiche shewyth one how he should count & rekyn is vsyd dyuers ways/ one waye it is called the comon countes vsed among auditours and marchauntes/ An other way is by Algorysme which may be done bothe with pen and counters

¶ In algorysme also thou must consyder that there be.ix. fygures & a cypre as this example folowynge sheweth/

1.2.3.4.5.6.7.8.9. 0.
i. ii.iii.iiii.v.vi.vii.viii.ix.cypre.

¶ And note euer that in redyng of Algorysme that the fygure which is euermore vttermost on the right hande as thou lokest on the boke is alway in the fyrste place and the other that is nexte to hym on the lefte hande is in the seconde place and the fygure nexte to hym on the lefte hande in the thyrde place/ ¶ And so lykewyse procedynge euer towarde thy lefte hande/Also euery place multyplyeth other by x.that is to saye euery fygure in the fyrste place betokenyth hym selfe/ In the seconde place.x.tymes hym selfe/in the thyrde place.c.tymes hym selfe/in the fourthe place.M.tymes hym selfe/ In the fyft place x.M tymes hym selfe/In the syxte place. C.M.tymes hym selfe/ in the seuenth place·MM.tymes hym selfe/which is a myllyon/and in the eyghte place.x.mylyons.in the.xi place. C.mylyons/ and so forthe euery place multyplyenge other by.x.as this table here folowynge sheweth.

1.10.100.1000.10000.100000.1000000.
i .x. C. M .x.M. C.M. M.M/
2.20.200.2000.20000.200000.2000000.
ii.xx. C C. ii. M .xx.M. C C.M .ii.M.M.

¶ The cypre meuer standeth for any nombre but onely to fulfyll the place and maketh the fygure next hym to multeply by.x.but if there be.ii.cypres togydre it maketh the figure to multyply by. C. And yf there be.iii.cypres to multeply by.M.and so forthe/

¶ Also of algorysme there be.v.partes/ ¶ The fyrst is addycyon/ the seconde substractyon/the thyrde multyplycacyon/ the fourthe deuysyon/and the fyft the takynge out the rote/ How be it some men put duplacyon and medyacyon to be.ii other partes of Algorysme which sholde seme superfluons/forthe that knoweth parfytly the forsayde.v.partis maye sone knowe duplacyon and mediacyon without dyffyculte/ for they be encludyd in the other.v.ptes·

¶ Addycyon/

¶ Addycyon is the fyrst parte of algorysme and that is to cast.ii.nombres or mo togydre for the which thyng to be brought to passe thou

f.i.

must sette all thy nombres that must be so caste to gyder one aboue another so that the fyrste fygure of euery nombre of thy fyrste place must be dyrectly one aboue another & the secōd fygures on thy left hande directly one aboue another & so of euery place if there be more fygures in one nomber than in another than set those figures forth on thy left hand and one aboue another after this same maner and begyn to worke on thy ryght hande Example.

9.5.8.2.9.3. ¶ Thou must strike a line vnderneth those nōbres and
6.9.5.3.2. therin thou must reken all thy fyrst fygures to gydder
4.7.0.3. and yf all they be vnder the nombre of ten/than set that fygure that all they make dyrectly vnder them vnderneth thy lyne and yf all they make iust. 10.20. or any other artycle than set a cyfer and for the artycle here in thy mynde the fygure of the same artycle/ yf thy fyrst nombres so gedryd be aboue ten than set the dygyte that is aboue the artycle and here in thy mynde the fygure of the artycle/ and counte that for a dygyte in the seconde place/ & than reken that dygyte/ & al thy other fygures to gydder that be in the second place/ & gadyr al them to gydder and than do with that nomber as thou dydyst with the nomber gaderyd of thy fyrst fygure/

¶ Subtraccyon.

Subtraccyon is a part of algorysme by the which a smaller nombre must be taken or abatyd for to the greater & to knowe what is the reste/ ¶ For the which he to be truely done thou must sette the smaller nombre vnder the greater/ & euery figure dyrectly vnder a nother as I shewed the in addicyon and than make a strike vnder them bothe/ & than to worke it truly thou must begyn on thy ryght hande/ & loke wyther the fyrste fygure on thy ryghte hande of thy smaller nombre be smaller than the fyrst fygure aboue hym of the greater nombre/ or equall or more/ ¶ If it be smaller thā take so moche out of the vpper fygure & wryte that that is the reste vnderneth the lyne dyrectly vnder these sayde fyrst fygures/ & than stryke out those fyrst fygures/ but yf the firste figure of thy smaller nōber be equal with the fygure of the vpper nōber/ than yf thou take the one out of the other there wyll remain nothyng/ & thā set vnder thy lyne a cifre vnder both those figures/ but if thy nether figure be more than the vpper figure/ thā thou must borow an vnite of the next place/ which is ten in cōparison to the fyrst place & thā marke what nombre that ten & that fygure bothe to gyder do make/ & than take that nether fygure out of that nombre/ & here one in thy mynde to the next place/

¶ Multyplycacyō is a parte of algorisme to multiply one nōber by a nother that is to say to take the one nombre as oft as there be vny tes in the other/ & therfor in the syte of ¶ Multyplycacyō thou must haue euer .ii. nōbres that is the nōber to be multiplyed & the nomber by the whiche thou must multipli/ which is called thy multiplier/ The nōber multiplied is the nōber that commith of the other .ii. and thou must set the on nōber directly aboue the other as I shewed the befor i addicīō & subtraccīō & thā make a stryke with thy pen vnder both those nombres/ and begyne to worke on thy ryght hande/ and take the fyrst fygure of thy ouer nomber and the fyrst fygure of the nether nombre and multyply them to gyder and set the nomber that they make vnderneth the stryke dyrectly vnderneth the seyd .ii. fygures and than that done multiply agayn thy fygure that is thy multyplyer with the seconde fygure in the seconde place/ and sette that that comyth of them vnder thy lyne in the second place & that done multyply that fygure agayne with the thyrde fygure in the thyrde place and so wyth euery fygure tyl thou hast wrought it with euery fygure of thy great nomber to be multyplied/ ¶ Also yf the fygures to be multiplied togyder be to the nōber of .10.20.30. or any other artycle/ tha thou must sette downe a cifre & bere the fygure of that article in thy mide as thou dost in addycyō/ ¶ Also yf thy nōber wher by thou shal multiply be two figures or more than thou must fyrste multiply thy first figure with the first & set that that cometh therof directly vnder thy first place/ And than multyply hym with the secōd fygure & set that that comyth therof vnder thy line in the secōd place/ & that that cōmeth of the third in the thirde place/ & so forthe tyl thou hast multiplied hi throughe/ as I shewed the before/ and whan thou haste fully multyplyed thy fyrste fygure of thy multiplyer than go to the seconde fygure of thy multyplyer and multyplye that secōd figure with the fyrst figure of thy nomber to be multyplyed/ & that which cōmyth of thē set it in the secōd place/ & if that which cometh of thē amoūt aboue .10.20.30. or any other artycle/ thā sette downe the digite that is aboue that article & bere in thy mynde the fygure of that artycle to the next place & that done thā take again that seconde fygure of thy multyplyer/ and multyplye that fygure with the secōd figure of thy nōber to be multiplied/ & that which comyth of them set in the thyrde place/ & so worke it forthe tyl thou hast multyplyed hym throughe all thy nōbres to be multiplyed.

¶ Dyuysyon.

Dyuysion is to parte one nomber in to as many equal nombres as thou wylt/ & to this kynde it requyreth to haue thre nombres/ ¶ The fyrst is the great nombre to be deuyded/ The secõde is the nõber wherby thou shalt deuyde/ which is callyd thy deuysour/ & the thyrd is the nombre that cõmyth of them which is callyd thy quocyent/ and some tyme there shal be a remanent/ & for to worke this truely/ fyrst thou must wryte thy great nomber to be deuyded/ And than make .ii. lynes pararels vnderneth in such wyse that betwene them thou mayst wryte another nomber and thã wryte thy nombre called thy deuysour vnder bothe those lynes begynnynge on thy lefte hande/ And than yf the fyrst fygure of thy deuysour be smaller than the fyrst fygure of thy great nombre than sette that fyrst fygure of thy deuysour dyrectly vndereth the fyrst figure of thy great nomber. But if the first figure of thy deuisour be greater thã the first figure of thy great nõber than set that fyrste fygure of thy deuysour more forward towarde thy ryght hande vnder the nexte figure of thy great nomber. as ye shall se by example.

.5.3.2.4.		.5.3.2.4.	
	.3.		.6.

¶ Than yf thy deuisour be but one figure thã thou must deuide that by euery fygure synguleryly & set the quocient betwene the lynes. & than multeply that quocyent with thy deuisour & subtract that which cõmeth of thy multyplycacion from the fygures of thy great nõbre/ ¶ Also yf thou wylt deuyde by .ii. nombres so that thy deuysour be two fygures thou must do as I shewed the before/ set thy deuysour vnder the great nomber & vnder bothe the lynes pararyls so that the fyrst fygure of thy deuysour be dyrectly vnder the fyrst fygure of thy greate nombre yf it be lesse than he/ ¶ But yf it be more than he than auaunce hym to the next place toward thy ryght hand and the seconde fygure of thy deuysour vnder the next fygure of thy greate nomber as thys example shewyth/

5.3.2.4.		5.3.2.4	
	2.7.		6.2.

so that yf thou wylt deuyde this greate nombre by .27. begyn at thy lefte hand and se how many tymes .2. thou mayst haue in .5. & multyply that with the .2. which is the fyrst fygure of thy deuysour/ but se and take hede

that thou marst haue as many tymes. 7. out of that that remaineth of the. 5. 4. 3. of thy great nomber/and than sette down thy quocyēt betwene the lynes and multeply hym first with the fyrst fygure of thy deuysour/and that which cōmyth of that multyplycacyō subtract from the fyrste fygure of thy great nomber and than stryke out the fyrst fygure of thy great nombre and than stryke out the fyrst fygure of thy dyuysour & set that whyche remaynethof thy subtracion ouer the fyrst fygure of thy great nombre/and than multeply the quocyēt agayn wyth the second fygure of thy dyuysour and that whyche cō meth of thy multyplycacyon subtract from the second fygures of thy great nomber and of that whyche remaynyd and than stryke oute the seconde fygure of thy great nōber & the fygure that remaynyd & than strike out the second figure of thy deuisour and set that which remaineth of thy subtraccion ouer the remenant and the fygure of thy great nombre. And euer whan there restyth nought sette a cyfre and so worke euer forth tyll thou haue done/and than the nōber be twene thy lynes is euer thy quocyent which thou woldyt knowe.

¶The takynge out of the rote.

¶The takynge out of the rote is in two kyndes/One is callyd the rote ſquare/The other is callyd the rote cubyk/The takynge of the rote ſquare/of any great nomber is to fynde a nombre which multyplyed in hym ſelf maketh the great nomber as.2.is the rote ſquare of.4.&.3.is the rote ſquare of.9.&.4.is the rote ſquare of.16.for.2 tymes.2.maketh.4.& 3.tymes.3.maketh.9.&.4.tymes.4.maketh. 16.¶The takynge of the rote Cubyk is to fynde a nombre whiche multyplyed in him ſelf as oft tymes as there be vnytes in that rote maketh the hole greate nomber/as.2.is the rote Cubyk of.8.&.3.is the rote Cubyk.of.27.&.4.is.the rote cubyk of.64.for.2.tymes.2.2. tymes.maketh.8.&.3.tymes.3.3.tymes maketh.27.&.4.tymes.4. 4.tymes.maketh.64.

¶Alſo there be many concluſions in geometry & Aſtronomy which can neuer be well lernyd without this ſcience of takyng of the rote therfore it is neceſſary to be had/

¶Therfore fyrſte as concernyng the takyng of the rote ſquare thou muſt fyrſt wryte thy great nombre out of the which thou wylt take thy rote/& than draw.ii.lynes paralels vnder that great nombre betwen the which lynes thou mayſt wryte thy rote/and than vnder the fyrſt fygure vpon thy ryght hande make a prycke/& vnder the thyrd fygure than toward thy left hãd make a nother prycke & vnder thy fyft fygure towarde thy left hande another prycke and ſo vnder euery odde fygure tyl thou haſt prycked euery odde fygure as this example ſheweth/

.2.3.3.4.7.8.4.

¶That done begyn thy worke at the vttermoſt fygure vppon thy left hande which hath a prycke/and fynde out a dygyte which dygyte multiplied in itſelf taketh away that ſame fygure or els as moch as it may take away/but yf there be a nother fygure vpon thy left hande vnprycked than fynde a dygyte, whyche multyplyed in hym ſelfe taketh awaye bothe or as moche as it maye take awaye and ſette that dygyte ſo founde betwene the lynes dyrectly vnder that

fyrſte fygure of thy greater nomber towarde thy lefte hande whiche hath the pryck. and than multyplye that dygyte by it ſelfe & ſubtra that which cometh of the multyplycacyō from the fygure or fygures of thy greate nombre & than ſtryke out that fygure or fygures of thy great nombre and than yf any thynge be ouer than that which ouerythmuſt be wryten ouer the hedes of the fygure or fygures of thy great nombre & ſtryke them about with a lyne for a parfyte remembraunce of thy worke that thou haſt wrought/

¶ Than double that ſame dygyte that thou haſt fofounde and ſette that nombre whyche commyth of that ſo doublyd/ vnder both the lynes/ ſo that yf the nombre ſo commyng of the double be but one figure than ſet that fygure vnder the next fygure toward thy ryght hāde whiche is not pryckyd/ but yf the nomber ſo comyng of the doble be two fygures thā ſette that fygure which is for the dygyte vnder bothe the lynes directly vnder the fygure whyche is next vppō thy ryght hande vnprikyd/ & ſet the figure which is for thyne artycle vpō thy lefte hād directly vnder the forſaid fygure which hath the prick

¶ Than go forth wyth thy worke and fynde a fygure which multyplyed with that nomber that comyth of the double dothe take away all the nomber of the laſt fygure whyche dyd remayn whyche thou dydyſt marke and ſtrike wyth thy lyne for thy remembraunce of thy worke/ & of the nexte fygure on thy right hāde/ which is vnprycked or els as moche as it may take away & after multyplyed with it ſelfe taketh away the fygure with the pryck & all the reſt before yf there be ony/ & thā ſet that digite between the lynes vnder the next figure vpō right hād which hath a prik/ & thā multyply that figure ſo fōūd with that nōbre ſo doubled & ſubtra that which cometh of the multiplicaciō frō the figure which did remain/ & fro the next figure to him on thy right hād which is pte of thy great nōber/ & ſet that which remaineth ouer their hedes as thou didyſt before/ & thā multyply that figure that thou haſt fōūd by hiſelf & ſubtra that which cometh of the multiplicaciō fro the figure ouer him which hath the prick & frō that which remaineth before if there be any/ & if any thyng remain ſet it ouer their hedes as thou dydyſt before/ ¶ Tha loke what nōber all thy figurꝫ betwene the lynes do make & double that nōber again & ſet that which cōmeth of the double iſō other place beſide thy worke to bere it better in mynde/ & than go forth wyth thy worke and fynd a fygure whyche multyplyed wyth that which cometh of the double dothe take awaye all the nomber of the laſte fygure afore named whyche dyd remayn whyche thou dydyſt ſtryke about wyth a lyne

and of the nert fygure to hym vppon the ryght hande which is vn
pryckedor els as moche as it may take away & than set that fygu
re so found betwene the lynes vnder the nert fygure vpon the ryght
hande whichehathe a pryche/And than multyplye that fygure so
founde wyth that nombre so dobled and subtra that whych comith
of the multyplycacyon fro the fygure or fygures which dyd remayn
& fro the nert fygure vppon they ryght hande whyche is part of the
great nombre/& sette that whiche remayneth ouer theyr hedes as
thou dydyst before

¶ And than multyply that fygure that thou haste so founde by hym
selfe and subtray that whyche comyth of the multyplicacyon fro the
fygure ouer hym whyche hath the pryk and fro that/whych remay
nyd before yf ther be any/and yf any thyng than remayn set it ouer
theyr hedes as thou dydst before/

¶ Than loke agayn what nomber all thy fygures betwene the ly-
nes do make and double that nomber agayne/& worke than wyth
that nombre so dobled in euery point as thou dydyst with the other
nōbre whiche was before dobled.

¶ And whan thou haste so done/than double all the nombre of all
thy fygures betwene the lynes agayn & worke after the same ma-
ner/and that so done worke so agayn tyll al thy worke be tunyshed.

Here after folowe̅th the moste pleasaunt scy-
ence of Musyke. Capitulo. xii.

Musyk is the scyence of all other moste pleasaunt/ which is but the orderyng of swete sownes/ & tewnys set in perfyte accordes to make pleasaunt armony to mānes ere/ ¶ This scyence of it selfe is moche to be praysed/ for it is lyke a salue or a medycyn for euery dyssease/ for whan a man is pensyfe & sorowfull the exercyse of this scyence maketh hym to reioyce and be glad/ & remyth his dull spyrytes/ It dothe quycken & refresshe the wyt/ it encreaseth loue. and puttyth away stryfe/ it maketh pleasaunt pastyme/ it maketh myrth. & good chere to euery man that herith it/ it encresith vertue & putteth away vyce/ it causeth helthe of body & prolongyth a man hys lyfe.

¶ A sowne is nothynge but a stroke & reuerberacyon of the ayre/ whether it be made by voice/ by blowyng in a pype/ or by knockyng of any two thynges to gyder/ or by straynynge of a corde or stryng/

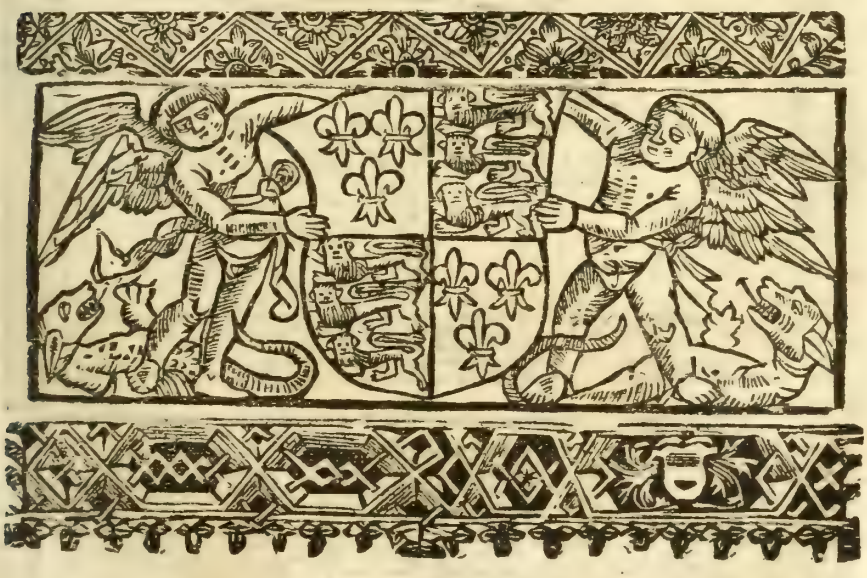
¶ A towne is nothyng els but the proporcion betwene a low & a base sowne & a sowne which is more sharpe & hye/ wherfore if you will perfytely know a perfyt & a full tune/ it is no more but the proporcyon be twene. viii. & .ix. which if ye wyl perfytely know & trye ye must worke thus/ Take a smale cuyn strynge & streyn it vpō a playne borde and touche it & take hede what sowne it maketh/ & thā mesure that into ix. equall pt̄s & put a frete & stop hym at the furst pt̄ so that the other viii. part̄s remayn/ and thā touche the stryng agayn/ & thā take hede what sowne it maketh/ & ye shall fynde betwene those .ii. sownys a hole towne/ & the deper sowne of the hole .ix. partes is called. o the. & the other sowne of the. viii partes is callyd re/ but betwene that re/ and the. o the. is a dyscorde/ ¶ Also yf ye wyl assēde to another tune from re/ to my. than ye muste marke that same stryng that maketh the. re. which was made before of the. viii. partes/ and ye muste de uyde that agayn in to. ix. partes/ and than put a frete and stoppe it at the furst of those .ix. ptes and towche it agayn and ye shall fynde thā a nother sown more hye/ which is another hole tune frō the. re. and it is callyd my. and it is callyd a corde imptyte from the oth and callyd in englysh a thyrde/ Allso if ye wyl trye the fa. which is callyd a semytune ye must do thus. streyn the fyrst small stryng vpō a playn borde as I sayd before. And than deuyde and mesure that stryng in to. viii. euē ptes/ thā put a frete & stop it at the furst of those. iiii. pt̄s & touch it again/ & thā ye shal fynd the same sowne more hye whiche is callid fa. & it is but the semytun fro my. & the sown betwen the oth & that. fa. is called the diatesserō/ which is called i englysh a fourthe. which is a dyscorde/ Also yf ye wyll try the sol. ye must note wel that frō fa. to soll. is a hole tune/ therfore ye must do as ye dyd before that is to say marke the length of your stryng whan it made fa. & thā deuyde it agayn into. ix. euyn ptes/ & than make a frete & stop it at the furst of those .ix. ptes & touch it agayn & ye shal finde than a nother sown more hyer which is callyd the soll. & it is a hole tune frō the fa. & that soll/ & the othe. make a perfyt accord which is called the diapēte/ other wyse callyd in englysh a fyft. And if ye wyl try surely that dyapente ye must do thus/ sown the furst long stryng as I sayd before whych made the oth/ & thā deuyde & mesure that stryng into. iiii. euen ptes & thā put a frete & stop it at the fyrst of those. iii. ptes/ & touch it agayn & it shal make thys same other sown callyd the sol. & come iust to the same selfe place & frete. Allso if ye wyll try the la. ye must note that fro sol. to la. is a hole tune/ therfore ye must do as ye did before betwene fa. & sol/ & betwene that la. & the oth beneth is accord imphyte which in englyshe is callyd a fyft

¶ Also yf ye wyll assend to the.fa.aboue the.la. ye muste remember that the.fa.is euer a semytune fro the note next vnder hym/ and therfore ye muste do as ye dyd before betwene the.my.and the.fa.

Also yf ye wyll assend to a nother sowne more hye aboue that.fa. callyd the.soll.ye must note that frō that.fa.to the soll.is a holetune/

¶ Therfore ye must do as ye dydde before betwene the nether .fa .and the .soll.or betwene the.soll.and the.la.and than yet shal fynde betwene this.soll.and the.other.by nethe a perfyte corde callyd dyapauson/other wyse callyd in englyshe an eyght whyche is the most parfytest corde that can be

¶ Also ye must note that in euery instrumente whych is truly made this Diapauson must be seuenerydin to.xii.seuerall sownys/ and euery sowne is aboue other a iust semytune/ whiche ye must make & trye after this rule and order as I haue shewed you here before in tryengthe.fa.



Astronomy is the scyence most hye and subtyl of all other/for it sheweth & treatith of the mouyng of the celestyall speres and of the bodies aboue as of the Sonne/Mone/planettes/and of all other sterres/

¶Also by this scyence of Astronomy we knowe what thyng the great worlde is/which world yf it be wel defyned is but the congregacyon of al thynges/and this great worlde is deuyded in to two regyons/One is called the regyon Elementall/and the other is the regyon etheryall/¶The region Elementall is that which conteyneth the.iiii. elementes/The fyre the ayre/the water/& the erthe/¶The other regyon is that whiche conteyneth the planettes/the sterres/and all the celestyall speres/which thynges to declare & to expowne well must be by subtyll instrumentys/& fygures made therfore/

¶The erthe standeth in the mydes of the hole worlde/as the poynt and centre of the worlde and is permanent/styll and vnmouable/

¶The water lyeth about/& in/& vpon the erth/& fyllynge the great holow placys of the erthe vapo⁊ynge vp in to the ayre and descē dynge downe agayne/& so in to the see whiche is his moste p⁊opre place/

¶The eyre lyeth compassynge about the erthe and the water orbycularly as the whyte of an egge compasseth the yolke & mouyth collaterally and dyuers tymes and dyuers way⁊es/whyche we call the wynde.

¶The fyre lyeth compassynge lykewyse aboute the eyre/And all these foure elementys echone to myxte with other/and euery one of them dothe ascende and dyscende excepte the erthe which is vnmouable/

¶The Etheryall regyon is lyghtsome and baryaunt from all mutabylbeyng/and with a contynual mouyng goyth aboute all the other elementys and is mouyd vppon two pol⁊es/¶The one is cal⁊d

polys articus which is in our syght to vs that dwell here in the north parte/ ¶ And the other is called polus antearticus which is in the south parte but neuer in our syght and these be callyd the polys of the worlde.

¶ In this etheryall regyon ther be.ix.orbys or speres/that is to say. the spere of the Mone/the spere of Mercury/of Uenus/of the son/ of Mars/of Jupiter/& of Saturne/& these be the.vii.planettes/& euery of these planettes rennyth and mouyth in his owne spere or orbe naturally from the west to the east vppon theyre owne polys which be.23.degrees & more from the polys of the world/& echone of them performe their cours there in diuers spaces of tyme as Saturne performyth his cours in.30.yere/Jupiter in.12.yere mars.in 2.yere/The sonne in.365.dayes and almost six houres/venus and mercury almost lyke the sonne/The mone in.27.days.& viii.hours ¶ But yet euery one of these planettes hathe an other mouynge from the east to the west which he performyth in.xxiii.houres vpō these yd polys of the worlde/And echone of these speris do compas other orbycularly. And aboue these.vii.sterrys is the.viii.spere which is callyd by the laten men(celum stellatum)that is the sterryd heuen or the fyrmament/wherin all the other sterres ben fyxed.

¶ Also aboue this fyrmament with fyxed sterres/There is another spere called the ninth spere/how be it there is no sterre mouigi that spere nor fyxed in it/that we cā percepue or se/Also aboue that spere is another callyd primū mobile/¶ The first mouynge or fyrst mouer which mouyth vppon the forsayde polys of the worlde/ ¶ The one called polus articus/the other polus antearticus as is before sayd/ And this primū mobile mouyth euer frō the east to the west in.xxiiii hours/& he by his swyft mouig & violēt cours doth draw with hym al the other speres/so that al the other speris moue & rone about from the east to the west by his drawyng & mouig/And therfore we say that al the other speres moue from the east to the west by cōpulsyon & violens of primū mobile and it is called theyr violent mouynge/ But yet euery of those other speris haue an other proper mouynge as I sayde before from the west to the east which is called theyr own propre mouynge/and so euerychone of them hathe.ii.mouynges/lyke wyse as a whele which tournyth one wey/& vpon that whele there creppyth a flye which goth the contrary way/This flye must nedes haue.ii.mouynges/ ¶ One is her violent mouynge wherby the

whele to ward hyr about/and the other is hyr owne mouyng which is her creppynge from one place of the whele to another place of the same whele/So I saye that euery spere/sterre/and element mouyth as I haue shewed the/saue onely the erthe whiche is vnmouable and lyeth lyke a rounde boule in the myddes of all the speres as the pycke and centre of the worlde/

¶Now you muste vnderstande that as touchynge the spere of the worlde there be dyuers cercles wherof some be greate and some be small.

¶The great cercles be they which deuide the spere of the worlde in to two equall partes by the centre of the worlde.

¶The small cercles be they which deuyde the spere of the worlde in to two inequall partys and not by the centre of the worlde/

¶One of the great cercles i the spere is called the equynoccyal and his two poyntes or poles be the polys of the worlde/¶And this cercle deuydeth the spere of the worlde in to two equall partes/by the centre of the worlde/and it is of equall dystaunce from bothe those polys/and is called the equinoccyall because that whan the sonne is in that lyne which is two tymes in the yere.
¶One is in marche whan the sonne is in the firste poynte of the Ramme/and the other is in September whan it enteryth in to the fyrst poynt of the sygne of the Balans/than it is equal day and equall nyght in all the worlde/

¶There is also another great cercle in the spere of the worlde/and it is called the zodyak and it commyth of this greke worde zodion which is a beste/for whan this cercle is deuyded in to.xii.euen partes euery parte is called a sygne/and hathe his specyal name of ſō beast/for some propertye belongynge to that beste or els because of the ordre of the situacyon of the fyxed sterre to the facyō of that beste/

¶The names of the sygnes be these/The Ramme/The Bull/The twyndyls/the Crabbe/the Lyon/the vyrgyn/the balans/the scorpyon/the Sagytary/the Gote/the waterman/the fysshe/

¶ Andyᵉ muſt vnderſtande that this ʒodyak is a rounde cercle oꝛ garlande in the fyrmament hauynge.xii.ſygnes/ & euery ſygne conteynynge in lengthe.xxx.degrees & ſo all the ʒodiak conteyneth in lengthe.360.degres/ & euery ſygne is in bꝛede.xii.degres/ & the lyne which deuydeth the ʒodiak iuſt in the myddes leuynge fyue degrees on the one ſyde & fyue degres on the other ſyde is called the eclyptycall lyne foꝛ whan the ſonne and the mone be dyrectly vnder that lyne than happeneth the eclypſe of the ſonne oꝛ the mone/ And that parte of the ʒodyak which declyneth from the equinoccial toward the noꝛthe pole is called the ſeptentryonall/ parte boꝛeall oꝛ noꝛthe parte/ And thoſe fyue ſygnes in that parte which be the Ramme/ The bull/ the twyndyls/ the Crabbe/ the Lyon/ the Vyrgyn/ be called the ſeptentryonall oꝛ noꝛth ſygnes/ The other parte of the ʒodyak which declyneth from the equynoccyall towarde the ſouthe pole is callyd the ſouthe parte/ And the other fyue ſygnes be called the ſouth ſygnes/ & note well whãt that one ſeyth that a planette is in any ſygne it is as moche to ſay as it is vnder that ſygne/

Alſo thou muſte vnderſtande that there be fyue cercles goyng by the polys of ʒodyak and by the begynnyng of the.xii.ſygnes/ & theſe fyue cercles deuyde the hole ſpere in to.xii.equall partys and bꝛodyſt in the myddes/ and nere the ſayde polys narower and narower/ and euery halfe of thoſe is called a ſygne/ and accoꝛdynge therto all the hole woꝛlde is deuydyd in to.xii.equall partes whyche be callyd ſygnes/ ¶ Andſo euery thynge that is in the woꝛlde is in oꝛ vnder ſome ſygne

Alſo there be two other great cercles in the ſpere of the woꝛld which be called the colures/ ¶ One of theſe cercles is called the colure deſcendynge the ſtandynge oꝛ reſtynge of the ſonne oꝛ other planettes & it gothe by the polys of the woꝛlde and by the polys of the ʒodyak & by the moſt declynynges of the ſonne which is by the fyrſt poynt of the Crabbe & of the Gote/

¶ The other cercle callyd the colure gothe by the polys of the woꝛlde & by the poyntes of the ramme/ and the balans which make the two equinoccials/ Therfoꝛe this cercle is called the colure dyſcrybynge the equynoccyals/ And theſe two cercles called colurys mete and croſſe them ſelfe vpon the polys of the woꝛlde/

¶ Thus endeth the.vii.ſcyences.

¶ Here folowdeth of nature/and how she worketh/And what she is/ Capitulo/ xiiii°.

HOw shall ye knowe that our lorde god created nature fyrste of all/for she is the thynge by wiche al creatures/and other workes haue dured and lyue what so euer they be ordeyned of god vnder the heuen/without nature may nothyng growe/ And by her haue all thynges created lyke/ and therfore behoueth nature to be the fyrst/for she nourysseth and entertayneth all creatures/ & habandoneth her selfe where it pleaseth the creatour or maker/nature worketh in lyke wise whan she is emploied/as dothe the axe of a carpenter/whan he emploieth it in his worke/For the axe doth nothyng but cutte/And he that holdeth it addresseth it to what parte he wyll so that in the ende by the axe the worke is acheued and made after the entente of the worker/right so nature maketh redy and habandoneth where as god wyll/For all thynges ben made by her and entertayned as god wyll make them/and she worketh after this in such maner that yf she lacke on one syde she recouereth it on that other/nature fourmeth nothynge in vayne/But she werketh in suche maner that she taketh away fro nothynge his playn/ For her worke is alway hole after that she fyndeth mater beit in persones or in beestys/Than ben her workes aboue all other to be recomended as she that dothe nothynge than in ony wyse maye be contrary to god/But where as mater lacketh she leueth to werke and alway so moch there is more of mater so moche more she worketh. as men se of som beestis/of wiche some haue two hedes and vi. feet/or it hath a member lesse than he ought to haue/of which he abydeth wythoute very fourme naturall/and many be called ther fore a monster/all omen se other whyle some that almoste lacke all and other that haue plenty and haboundaunce in theyre faytes/all in lyke wyse falleth often and is sene happē vpō som men the which whan they ben born/they haue. vi. fyngres on one hande/ & other that haue one/or two/or thre/lesse than they sholde haue/or thē lacketh an hole membre/by wyche they be of lasse valewe of that that apperteyneth to the worlde/and in an other shalbe so great haboūdaunce of nature or mater in body or in membre that he hath other thynge than forme humayne setteth.for hym lacketh afote or a hande/Or he shal be born somtyme more or lasse/or he shal haue a legge more lōger or shorter or an arme thā the other/yet there is another thynge whiche ought not to be forgoten. For that one shal

be borne black or browne / & that other whyte / one great / an other lytell / that one shal happen to be wyse and discrete / and that other folysshe or shrewysshe / some be wyse & sadde in theyr yougthe / and in their age be ofte folysshe / some be foles ponge and olde

And other ben wyse all theyr lyfe ponge and olde / some be fatte & some be lene / some be sycke / and some ben hole / some ben slender / & some be thycke / some be hard / and some be rude / som be softe & tender / some be slowe / and some ben hasty / some be hardye / and some be towardys / some be lame / haltynge / and croked / some ben well fourmed in all ryghtes and poyntes / A greate man is ofte evyll made / and a lytell man is ofte well made and auenaunte / for there is no membre but it be well made and appertey nynge to his body A fayre chylde in his growynge becometh foule / some wyll haue theyr wylles / and other desyre it but lytell / euerych hathe his talente and his appetyte / a lytell man engendreth ofte a great man and a great man ofte getteth a lytell man / a lytel man otherwhyle empriseth to do a great thynge that a ryght great man wyll not empryse / some dye lyghtely and other lyue long / and some lyue as long tyll age make them to gyue ouer the worlde / after that that nature endureth to them by the wyl of god / also it is sene ofte among men that some entende to clergye / and other gyue them to other style of scyence & crafte as of Carpenter / Mason / Smythe / or any other crafte in which he employed his tyme / For euery man gyueth hym selfe gladly to that which his entendement is enclined to & to other crafte or scyence than nature and vnderstandyng gyueth hym to / he shall neuer vnderstande so parfytely ne so well medle with all as he sholde to that whyche his propre nature gyueth hym to / there ben yet other maner of people that sette and gyue thē self to do many thinges that other may not ne can not do / for as much as their nature hath not gyuen it to them / for some pretende to hye estates & great richesses / & other ben cotent with lytyl estate / & it happeth ofte that a mā cometh to that where he pretendeth & other can not come therto / but tourneth cōtrarye to thē & to their damage / & ofte with great payne may they come to their aboue / of the thynge that they wolde accomplysshe / & other do & make plente of thynges that som cānot ne may not do ne make / For in the persons be so many diuersytes & factōs / not lyke of rolles that mē shal not fynd in ony cōtrey of the world two mē that parfytely be like / how ferre they can seche / but that they ben diuers in some case / of body or of membres or of entendement / or of the vsage / or of theyr sayinges / or of theyre

sayes or dedes/ For the puyssaūce of nature is so dyuers that there is no thyng that hathe growyng but that she hathe vpon it myght in such wyse that she gyueth to one somethyng that an other hath not in hym/ how beit that no man can parceyue ony dyssaunce/ suche is the vertu of nature where plente of clerkes haue somtyme sette theyr entendement and cure and haue strongely laboured to thende that they myght the better declare the sayte & puyssaunce of nature/ & fyrst of al sayth Plato which was a man of great renown that nature in an ouer puyssaūce or might in thyngs that she maketh to growe like by lyke aft that that euerich may be/ & this may be vnderstande by one man that engendreth an nother/ and by bestys/ by plātes/ & by sedes/ the which after theyr semblaūces growe and after theyr facyon/ And lo this is that/ that the wyse plato sayth which was a great clerke/ After hym sayth arystotle/ that this was a great gyfte come fro the hye prynce/ whan he gaue vertue to the fyrmament & to the sterres for to be & to meue/ Arystotle that sayth this studyed in many a boke treatynge of nature/ Many other philosophers there were that sayd that nature proceded of vertues of hete which causeth al thiges to growe & nourysh/ But for this present tyme I passe ouer for to speke of other mat/ The philosophers ensewe better plato than Arystotle/ Thus sayde they that them semeth/ & they spake so hye lyke as afore is sayd/ that fewe clerkes myght attayne to come therto/ and for to abredge it/ he is not that might parfytely know what it is/ saue god that all knoweth and al seeth/ and that fyrst wolde establysh for to accomplysshe all thyngs here by may well be knowen that god is of moche great puyssaunce And it is of him a ryght great thyng/ whan he of nought and with out trauayle created & fourmed so excellent a thynge and so noble a werke/ And therfore wolde he hym selfe create and make man to the ende that he myght be so myghty and haue suche wytte and vnderstandynge in hym selfe that he knewe by nature that whiche myght greue him in his soule/ and lyue vnto our lord/ for yf he wyl iustely and ryghtfully conduyte hym selfe/ he may well bryuge his hert to that that nature shal not may greue hym in no maner/ and therfore were founde the. vii. sciences or artes/ for to take awaye the euyll thoughtes that might bryuge a man to the dethe/ which they may destroy by the sciences/ & thus may one chaūge his euyl estate/ by the teachynge of a good mayster/ and therfore it is good for to haunte amonge the vertuous men/ for there men may lerne and profyte in diuerse maners/ Thus than is he wyse that is pru-

dent in ſuch maner that after his dethe he hath the better/and that god receyueth hym in gree/Thus than he ſhal haue done more for his owne profyte than for an other/This knewe all men certaynly/ For he ſhal receyue al the wele/And moch is he a fole that ſo moche louyth his body that he forgetteth for to ſaue his ſoule/whiche god hathe lente to hym pure and clene to thende that he ſholde rendre it ſuch agayne at his deth/and that he gouerne hym not in ſuch wiſe that by his culpe and defaute de foule hym in ſynnes/he that ſo conduyteth hym ſelfe dothe in lyke wyſe as the euyll ſeruaunt dyd/to whom the mayſter delyuery̌d his beſauntes for to multyplyin good But he dyd not uſtly but as he that was of euyll layth wherfore the mayſter ſeynge the vntrouthe of his ſeruaunte chaced hym away fro hym/And euer after he had ſhame and repreue lyke as the goſpell wytneſſeth and to vs reherſeth/Allin lykewyſe ſhall it be of them that leuythe good grayn for the chaffe/theſe ben they that ſuffre theyr ſoules to peryſſhe for the playſauns of theyre bodyes/of whiche al euylles come to them herwith for this preſent I leue the declaracyon of the.vii.ſcyences and of nature/and purpoſe by the grace of god/to deuyſe the facyon of the world how it is by nature made & portrayed of god/whyche of one only wyl created the world and all that is therof appendant/Now entend ye to this that we ſaye to you.

¶ Of the fourme of the fyrmament Capitulo. xv.

GOd fourmed the worlde all rounde/lyke as is a pelette/the whych is allrounde/and he made the heuen all round whych

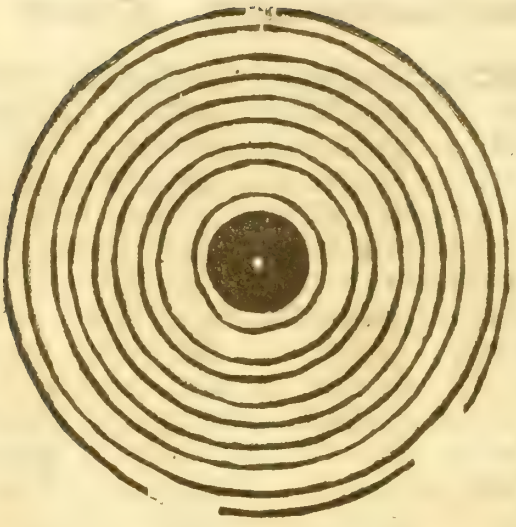
enuyronneth and gothe rounde about the erthe on al partyes hooly without any defaute/all in lyke wyse as the shelle of an egge that enuyronneth the whyte al aboute/And so the heuen gothe rounde aboute an ayre the whiche is aboue the ayre/the whiche in latyn is called Hester/This is as moche to say as pure ayre and clene/ For it was made of pure and of clere puryte

¶This ayre shyneth nyght & day of resplēdure perpetual/And is so clere & shynynge that yf a mā were abydynge in that parte/he shold se all/one thynge & other.& al that is from one ende to the other.also lightely or more as a mā shold do here bineth vpon the erthe the only lengthe of a fote or lesse yet yf he had nede/ All in lyke wyse I saye to yow/ who that were there/ he mightse al aboute hym as well ferre as nyghe/the ayre is so clere and nette/Of this ayeer the aungels taken theyre bodyes and theyr wynges whan our lorde god sendeth them in message hether lowe in to the erthe to his frendes/whan he wyl shewe them ony thynge/And therfore seme they to be so clere to synfull men in this worlde/that theyre eyen maye not suffre the resplendoure ne beholde the greate clernesse as they that bene full of obscurete and darkenes/ that is to saye of synnes

and of inyquytes of which they be replenissyed/And it happeth ofte tymes that whan angels ben comen to ony man in ony place by the wyll of god for to say & shewe theyr message/that whyles the angelle speketh to hym/he falleth to grounde as he were a slepe or in a traunce/& hym semeth he hereth not the worde of the aūgel but as he dremeth/And is muet wythout spekynge/vnto the tyme that the aungell repayreth agayne/Than whan he is awaked and comen agayn to hym selfe/he remembryth well the sayeng of the aūgell/and what he had shewed to hym/Thus I saye you trouth that no bodyly man/may not susteyne for to se hym in no maner/for so moche as a man is made of heuy matere/ne no byede ne so wele be he neuer so strong ne so well sleyng may not suffre to be there/but that hym behoueth to come doun as some as a done/ tyl that he com into the aire where he may repryse his sleynge/yf he were not abasshid to descēde/for there may nothyng abide/but yf it be thyng espyrytuell/ne may not lyue there/for no more than the fysshe may lyue in thys ayer where we ben in/ne suffeyne hym/but eyght sone must oye/and shortly perysshed/but if he be continually nouryssyde in the water/Allin lyke wyse I saye you of vs/for we may not meue in this ayre perpetuall ne lyue ne dwel there as longe as [illegible] mortall/

THis clereneſſe of which we haue ſpoken/which is cally'd ayer ſpyrytuall/And where the angels take theyr aray and atourement enuyrounctyall about the world/ the foure elementis which he god created and ſette one wyth in that other/ Of whych that one is the fyre/the ſecõde is thayer/The thyrd is the water/And the fourthe is the erthe/Of which that one is faſtned in that other/& that one ſauetyneth that other in ſuche maner as the erthe holdeth hym in the myddle/The fyre which is the fyrſt/encloſeth this aire/in which we be/And this ayer encloſeth the water after the wyche holdeth hym all aboute the erthe/All in lyke wyſe as is ſeene of an egge/and as the whyte encloſeth the yolke/ And in the myddle of the yolke is alſo as it were a droppe of greace which holdeth on no part/And the droppe of greace which is in the myddle holdeth on neyther parte/By ſuch and ſemblable regarde is the erthe ſet in the myddle of heuen ſo iuſte and ſo egally/that as fer is the erthe ſo hyeh ſo aboue as ſo bynethe /For wher ſo euer thou be vpon the erthe thou art lyke fare from heuen/lyke as ye may ſe the poynte of a compas which is ſette in the myddle of the cercle/that is to ſaye that it is ſette in the lower place/For of all foure lines that be made in the compas/alwaye the poynt is loweſt in the myddle/And thus ben the foure Elemẽtes ſette ..t one within tha. other ſo that the erthe is alway in the myddle/For as moche ſpace is alwaye the heuen from vnder the erthe as it appereth from aboue/ This fygure folowynge on that other ſyde of the lefe ſheweth the vnderſtandyng therof /and dely ſeth it playnly/& therfore ye may take hede therto/

¶How the erthe holdeth her ryght in the myddle of the worlde/ Capitulo. xvii°.

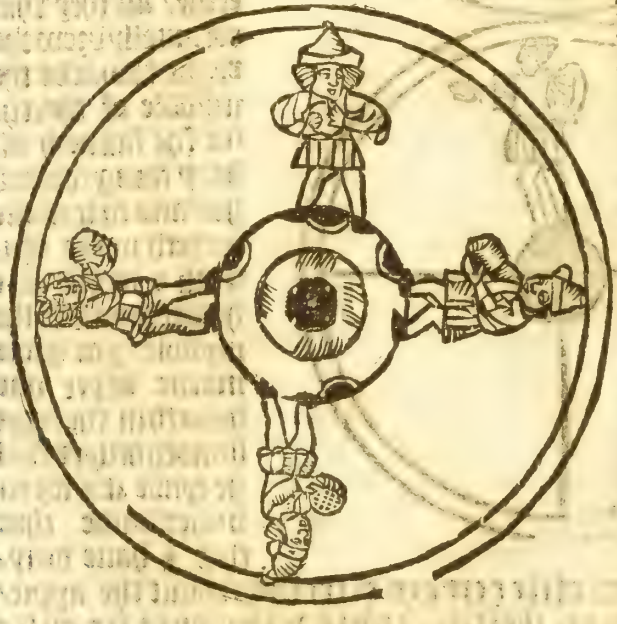


For as moche as the erthe is more heuy than ony other of the elementis/therfore she hodeth her more in the myddle/and that/which is most heuy abydeth about her/for the thynge whiche moste weyeth/draweth most lowest/ And all that is heuy draweth therto/ And therfore behoueth vs to ioyne to the erthe/and all that is extrayt of therthe/ yf so were and myght so happen/that there were nothynge vpon the erthe/water ne other thynge that letted and troubled the waye/ what so euer parte that a man wolde he myght goo rounde aboute the erthe/were it man or beste aboue and vnder/whych parte that he wolde lyke as a flye gothe rounde about a round apple/ In like wyse might a man go rounde aboute the erthe as ferre as the erthe dureth by nature/all about so that he shold come vnder vs/And it sholde seme to hym that we were vnder hym/lyke as to vs he sholde seme vnder vs for he shold holde his fete agaynst our fete/& the hede towarde heuen/no more ne lesse as we doo here and fete towarde the erthe/And yf he went alwaye fourthe his waye tofore hym he shold goo so ferre that he shold come agayn to the place fro whens he fyrst departed/And yf it were so that by aduenture two men departed that one fro that other And that one went alway to warde the east/and that other toward the weste/so that bothe two went egally it behoueth that they sholde mete agayn in opposite

place fro where as they departed/ And bothe two ſhoulde come agayne to the place / fro whens they meuid firſt. for than had that one & that other goone rounde aboute the erthe aboue & vnder/ lyke rounde aboute a whele that were ſtyll on therth in lykewyſe ſhould they go aboute the erthe/ as they that cõtinuelly drew thẽ ryght towarde the myddle of therthe for ſhe faſtneth all heuy thing toward her/ and that moſte weyeth moſte drawe-th & moſte nere holdeth toward the myddle/ For howe moche deper one delueth in the erthe ſo moch heuyer ſhal he fynde it & for to vnderſtande this that I haue deuyſed to you here to fore of the coynges of the flyes about the apple/ and of the men aboute the erthe/ In lyke wyſe may ye ſee all the maner & facyon by theſe two fygures the whiche ben here to you repreſented and ſhewed all entyerly/

But for to vnderſtande the better & more clerly conceyue/ yt may be vnderſtad by an other example/ yf the erthe were departed ryght in the myddle in ſuche wyſe that the heuen myght be

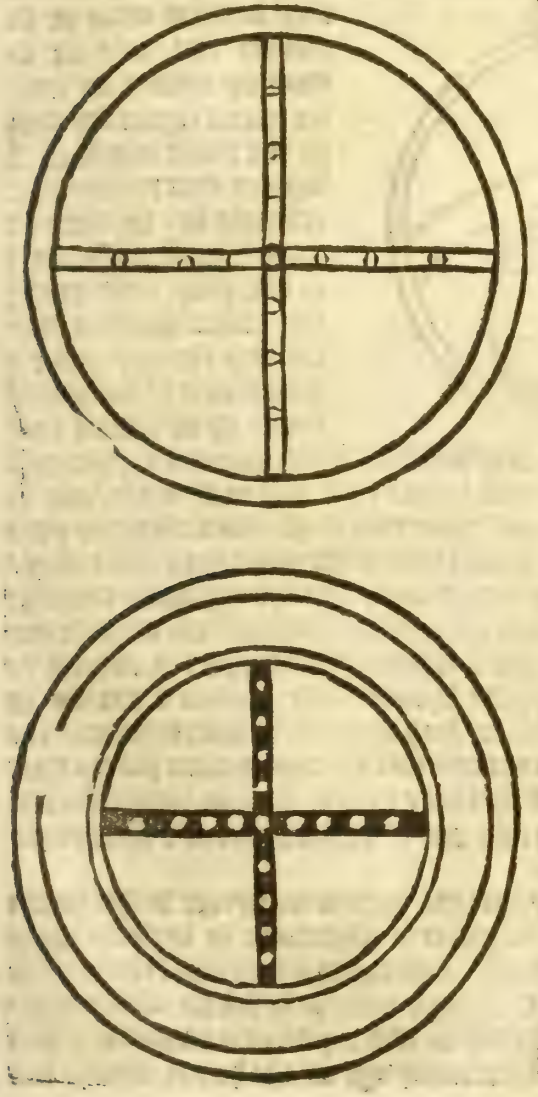
sene thrugh / And if one threwe a stone or an heuy plomette of leede that well weyed whan it sholde come in the myddle & half waye thrugh the erthe / there sholde it abyde and holde hym fourt myghte nether go lower ne aryse hyer / But yf it woere that by the force of the great heyght it myght by the myght of the weyght in fallynge fall more deper than the myddle / but anon it sholde aryse agayn in such wyse that it sholde abyde in the myddle of therthe / ne neuer after sholde meue thens / for than sholde it be egally ouer all vnder the fyrmament which tourneth nyght and day / And by the vertue & myght of his tournyng nothyng may aproche to it that is poysant & heuy / But withdraweth alway vnder it / of which ye may se the nature & vnderstandynge by thys present fygure here vnder.



¶ And if they were perced thrugh in .ii. places of whiche that one hole were cutte in to the other like a crosse & foure mens tode ryghte at the foure heedes of these two holes one aboue and another bynethe and in like wyse on bothe sides and that eche of thē threwe a stone in to the hole whether it were great or lytell eche stone sholde come in to the myd dle of therthe / with out euer to be remeuyd fro thens / but if it were drawen awaye by force / & they sholde holden them one about another for to take place euerych in the myd dle of therthe / and yf the stones weyed lyke / they sholde come there to al at one tyme as sone the one as the other / for nature wolde suffre it none other wise / & that one sholde come agaynst another as ye may playnely se by this fygure /

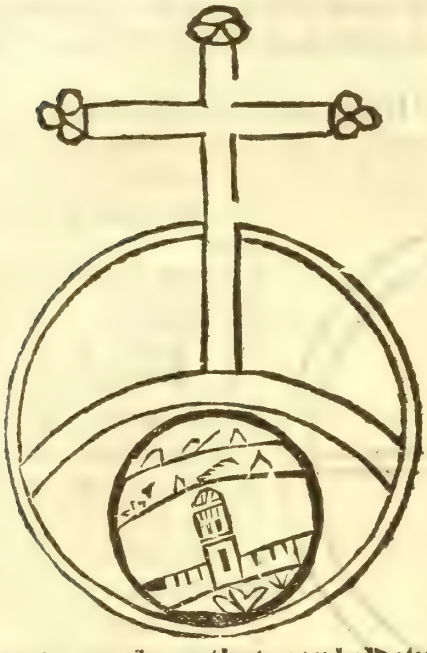
And yf theyr weyghtes and powers were not egall from the place from whens they sholde fall/that whiche were moste heuy/that sholde soneste come to the myddle of the erthe/and other sholde be al about her as this seconde figure sheweth playnly here vnder folowynge.

¶And so moche may be caste therin that the holes may be full like as they were tofore/as ye may se in this fygure which sheweth to you the playne trouth/ now this suffyseth ynough herof/& herafter we shal speke of other thinges/



¶what the roundenes of the erthe is. Ca.xviii.

NOw please it you to here for to deuyse playnly to you how the erth is rounde/who that myght mounte on hye in thayre & who that might beholde by valeys and by playnes the heyght of the great mountaynes/ & the greate & depe valeys/the great wawes and flodes of the see/they sholde seme lesse to appere vnto the greatnes of the erthe than sholde an heere of a man do vpon an apple/or vnder his figure/for nether mountaynene valey how someuer hye ne depe it be taketh not away fro the erthe his roundenes no more than the gall leueth to be rounde for his pryckes/ for it behoueth the erthe to be rounde/for to amalle the more people/ as ye shal here here aft folowing.



Almyghty god formed & created the worlde all rounde/ for all the fourmes that be/ of what dyuers maners they be/ may none be so plenere nor receyue so moch by nature/ as may the round figure/ for that is the moste ample of al figures that ye may take example by/ for there is none so wyse ne so subtyl in al thyng ne so moche can vnderstād/ that may for any thynge make a vessell be it of wode or of stone/ or of metall that may be so ample ne that may holde within it so moch in ryght quātyte as shal do the round/ Ne fygure that ony may make/ may so sone meue ne so lyghtly make his tourne to go about/ that ony man can vnderande/ but that it must take other place than this tofore/ saue onely the rounde which may meue rounde without takynge other place/ for she may haue none other than the fyrst/ ne passe one onely lyne or Raykro the place where she holdeth her in/ wherof ye may se the nature by a fygure squared sette within a rounde or an other which is not rounde/ And make them both to tourne/ the corners of them that ben not rounde shal take dyuers places that the rounde secheth not/ and that may ye se by these .iii. figures in one which ben here/ of which that one is round al about & that other twayn ye may se squared/

Yet is there an other thynge that there is nothynge vnder heuen enclosed of what dyuers facyon it be/ that maye so lyghtely meue by nature as may the rounde/ And therfore god made the worlde rounde/ to this ende that it myghte beste be fylled on all partyes/ For he wyll leue no thynge voyde/ and wyll that it tourne day and nyght/ For it behoueth to haue meuynge on the heuen/ whiche ma

keth all to meue/ For all meuynges come frome the heuen/ therfo
re it behoueth lyghtely and swyftely to meue/ and without it there
is nothynge may meue/

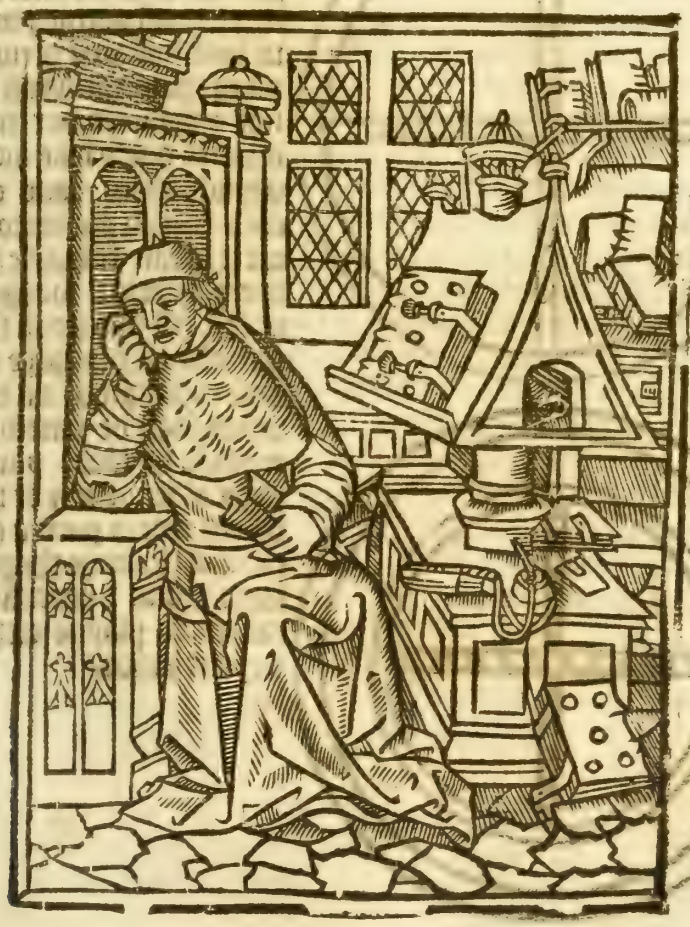
¶ Of the meuynges of heuen and of the vii. planettes/ and of the quantyte of the eithe vnto the regarde of heuen/ Capitulo vi.

Almyghty god gaue meuynge vnto the heuen/wh̄yche gothe so swyftly and so appertly/that no man can comprȳse it in his thought/but it semeth not to vs for his greatnes/no more than it sholde seme to a man/yf he saw fro ferre a hors ronnyng vpon a great mountayn it shold not seme to hym that he meuyd And for so moch as he shold be moste ferre from hym so moche the lesse shold he seme to goo/And the heuen is so moch hye and ferre aboue vs that yf a stone were in the ayre as hye as the sterres be/And were the moste heuyest of all the worlde of lede or of any other metall/And began to fall from an hye aboue/this thynge is proued and knowen/That it sholde not come to the erthe tyll the ende of an hondred yere so moche and ferre is the heuen fro vs/The whyche is so great that al the erthe about hath nothyng of greatnes agaynst the heuen no more than hathe the poynte or pricke in the myddle of the moste great compas that may be ne to the greatest cercle that may be made on the erthe/And yf a man were aboue in heuen/and beheld & loked here downe in the erth/And that all the erthe were brennynge al in coles flammynge and lyghted/it sholde seme to hym more lyttell than the leste sterre that is aboue semeth to vs here in erthe/thoughe we were on a mountayne or in a valeye/and therefore it may well be knowen that the heuen muste lyghtely meue/whan it maketh his tourne & goth round about therthe in a daye and a nyght/lyke as we maye parceyue by the sonne/that men se in the morynng arise in the orȳent or in the east/& gothe downe in the west/and on the morne erly we se him com agayne in the east/For than he hathe performed his cours rounde about the erthe/which we call a day natural/the which conteyneth in hym daye and nyght/Thus gothe & cometh the sonne which neuer shall haue reste/ne neuer shal fynysh to go with the heuen/lyke as the nayle that is fyxed in the whele/the whyche tourneth whan the tourneth/But bycause that it hath meuynng agaynst the cours or turnyng of the fyrmament/ We shall saye to you an other reason/yf a flye wente rounde aboute a whele that went round it self/And that the fly went against it The whele shold bryng the flye with her/& so shold it fall that the whele shold haue made many tournes/whiles that the flye shoulde make one tourne/and ere she had gone rounde about the whele vnto the fyrste poynte/So ye must vnderstand that in suche maner goth the mon/& the sonne/by away that is comune to the .vii. planetes that be on the heuen/which al go by the same way alway to the east/al

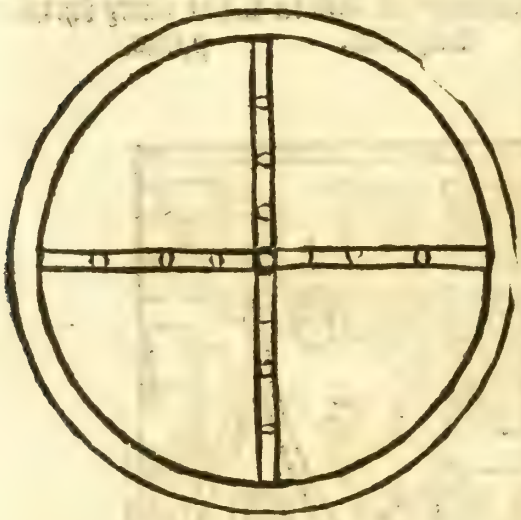
the heuen tourneth towarde the weſt/lyke as nature ledeth hym/ Thus herwith the fyrſt partye taketh his ende of this preſente boke/And ſhall folowe for to deuyſe of the ſecond partye of therthe & of the fourme of the fyrmament/

¶Thus endeth the fyrſt partye of this preſent boke/

¶Here after begynneth the ſeconde partye of this preſent boke/ and declareth how the erthe is deuyded and in what party ſhe is enhabyted/ Capitulo. primo.

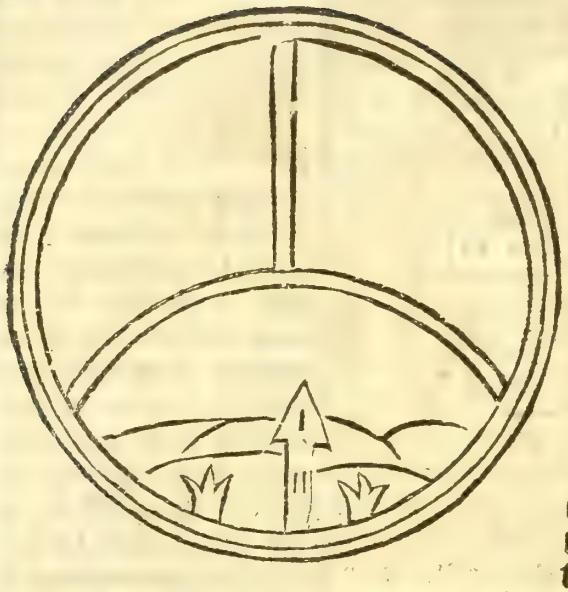


Ecauſe that the erthe is ſo lytyll as ye haue herde here
toſore deuyſed / lytell may we prayſe the goodes therof
vnto the regarde of heuen / leſſe than men do donge a
gaynſt fyne golde / or agaynſte precyous ſtones / how
that in the ende that one and that other ſhalbe of no va
lew / but for ſo moche as we beynge in this worlde vs
ſemeth that the erthe is very moche / we haue declared to you as
well the roundenes as the greatnes to our power & that ſhortely /
ſythe we haue vnderſtand
howe the erthe is rounde
on all partes as an apple
Neuertheles it is not enha
byted in all partyes which
is well knowen of no peo
ple of the world / And yt is
not enhabyted but in one
quarter onely lyke as the
phyloſophers haue enter
ched / which put for to kno
we it greate trauayle & ſtu
dye / & therefore we ſhall de
uyſe it all aboute in foure
partyes / of whiche ye may
take enſample by an apple
which ſhall be parted i the
myddle in foure partyes
right of lengthe & of brede
by the core / & pare a quar
ter / and ſcratche the parell
for to ſe and vnderſtād the
facyon in playne erthe or
in your hande /



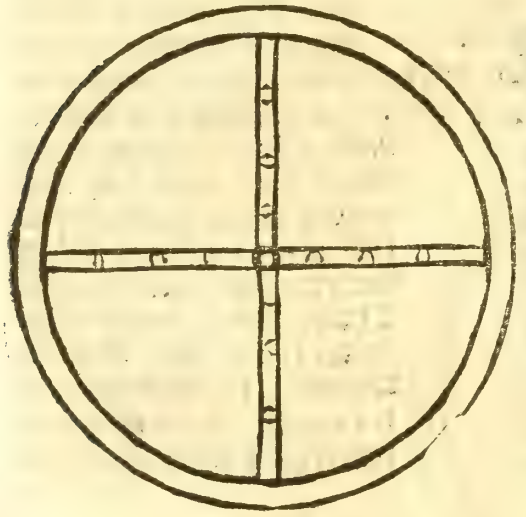
And in the ende of this line/like as the goethe ryght by lyne we may se a cyte which is callyd Aron/it is set in the middle of the worlde/& was made al rounde/ There was founden first Astronomy by great studye/by greate maystrye/and by greate dylygence/Thys place Aaron is named the right myd day as the that is sette in the myddle of the worlde/that other hede of this lyne which goth ryght towarde the lefte syde is called Septentryon that is to say Northe/and taketh his name of the.vii.sterres/and torneth towarde an other sterre that ledeth the maroniers by the see/ In that other lyne that is the myddle which the south cutteth in the ende towarde the easte as the auctours saye is paradys terrestre/where Adam was in somtyme/This place is called Orient that is to say east/for fro thens cometh the sonne which maketh the day aboute the worlde/And that other hede is called occydent/that is to saye weste/for there the daye fayleth and waxith darke whan the sonne goeth downe there.thus & by this reasō be named the foure partyes of the worlde of which the fyrste conteyneth the easte The seconde the west/ The thyrde the southe/ And the fourthe the nozth/& thus that we entyne you/ye may se by this fygure tofore specyfyed.

These foure partyes that I haue declared to you/ whych ben sette in



in a quarter of all the erthe of the worlde ought to haue a rou̅de fourme. For reson & nature giueth that al the worlde be rounde/ And therfore vnderstandeye of this quarter as it were all rounde/

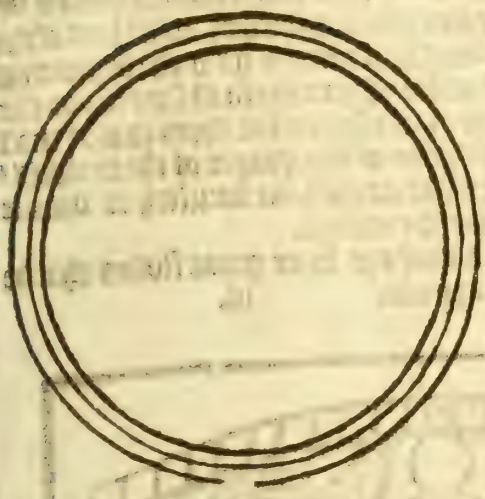
¶ Now make we thā of this quart a cercle that is al rounde & all hole/ and lette vs sette in the myddle of this lyne that sheweth the easte and the west for to sette the partyes in theyre ryghte as this



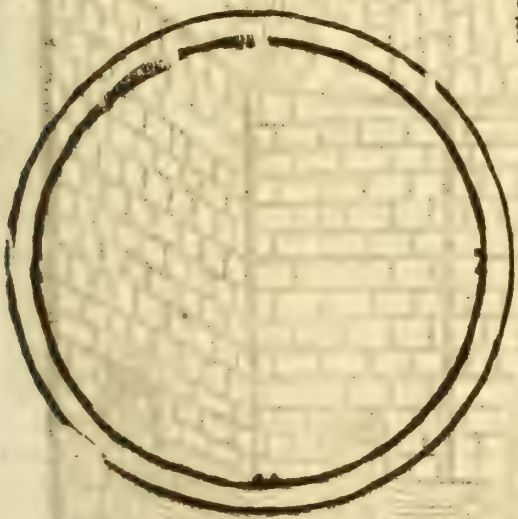
present fygure that here is represented sheweth to you playnely/

After let eche partye be tourned towarde his name in the erthe/ of whiche eche shall be the .iiii. parte/ & this presente fygure is enfignement & demonstraunce certayn and trewe without any variacyon ne doubtaunce/

¶ What parte of the erthe is enhabyted/
Capitulo. ii.



All the erthe that is in the worlde enhabyted is deuyded in thre partes/and therfore it behoueth by this reason to make another dyuysion/Of which the partye toward oryent is callyd Asia the greate/And taketh the name of a quene that sometyme was lady of that regyon and was callyd Asia/ this party callyd Asia holdeth and contenuth as moche space as do the other twayne/ And therefore it is called Asia the greate/ and dureth fro the northe vnto the southe lyke as this figure sheweth.



That other parte is called Europe/and taketh his name of a kyng callyd Europes/the which was lord of this cõtrey/and therfore it was so called/& it endureth fro the weste vnto the northe/ & marcheth vnto Asye the great/that other parte is Affryke whiche stretcheth fro the southe vnto the west & Affryke hathe his name of helpe/& is as moche to say as bornaway lyke as this fygure deuyseth in.iii.partyes of which fygure this is the demonstraunce/

¶ Of these thre partyes of the world here tofore named holden diuers many regions & many contreys/of which or at the least of the moste noble party we shal declare the names/& how the bestes that ben there ben moste comonly called/Thus we shall saye to you the condycyons & fourmes of some/& in especyall of them that be most rene by men. And fyrst we shal speke of the people of the contreis/ And after of the bestes & fisshes lyke as the boke deuiseth to vs out of whiche is drawen this Mappe muudi.

¶ First of paradys terrestre/and of the foure great flodes that departe fro thens/ Capitulo. iii.

The firste regyon of Asia the great is paradis terrester/this is a place whych is ful of solas/ of plesaunces/& delytes/so that none that is therin may be gre ued ne haue none euyll in no maner of the world/In this paradys is the tree of lyfe/and who that had eten of the frupte/he sholde not dye as longe as the world endureth/But no man lyuyng may come theder/but if our lorde god or his angell conduyted and broughte hym theder/For rounde aboute/it is enclosed with lyre brennynge the which gothe flämynge vnto the clowdes/There within sourdeth & spryngeth a fontayne or well which is deuyded in to foure flo des/Of whome that one is called vngages that renneth a longe thrughe the Royalme of Inde/and departeth in to many armes or braces/It sourdeth of the mounte that is called Dytobares/the which is toward the oryent/and falleth in to the see Occyan/ The seconde is named gyhon or nylus/whiche entreth in to the erthe by a hole/and renneth vnder the erthe so ferre that it resourdeth in to the longe see/which enuyronneth all Ethiope so that it departeth in to.vii partyes & gothe rennynge by Egipt so long that it cometh & falleth in to the greate see/The other two flodes of whiche that one is callyd Tigris/and that other eufrates sourden in hermeny nyghe vnto a moche great mountayn which is named partheacus And these two flodes trauerse many great contreys so long tyl they mete in the see togydre where bothe two falle in lyke as theyr na ture requyreth/On this side paradys terrester all aboute ben many dyuerse places without any resorte/for none may dwell there ne fynde place to lyue in/but there be plente of euyl bestys which ben lyers & crympnell & of many gyses/there ben gyauntes rough and heery whiche deuoure and eate all thynge as wolues done/And many other wylde bestes/

There speketh of Inde & of thynges that be founde therein/ Capitulo. iiii.

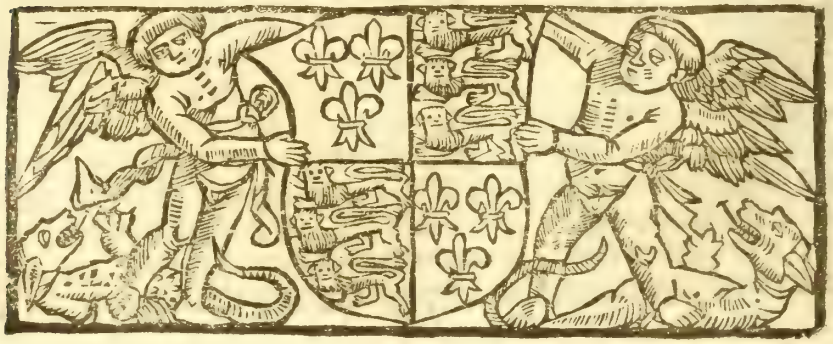
After comen the contreys of Inde which take theyr name of a water that is called Inde whiche fourdeth in the north/The Indes ben closed with the great see that enuyronneth them rounde aboute/In Inde is an yle named Pzodane wherin ben founden ten cytees and plente of other townes/where as euery yere ben two somers & two wynters/& ben so attempzed that there is alway verdure/& vpon the trees ben contynually floures/leuys/and fruytes/And it is moche plentuous of golde and syluer and mochefertyle of other thynges/ There be the great mountaynes of golde and of pzecyous stones & other rychesses plentye/but no man dare aproche it for the dragōs and for the wylde gryffons/whiche haue bodyes lyke lyons/flyeng which easely bere a man awaye armed/and syttynge vpon his hors whan he may cease hym with his clawes or vngles/There be yet plenty of other places so delectable & so swete/that yf a man were ther in/he sholde say that it were a very paradys.

Here folowēth the dyuerſytes beynge in the lande of Jnde.

Capitulo. v.

IN the lande of Jnde is a ryght great moūtayn that men call mount capyen/ and it is a moche great regyon. There ben a maner of people without wytte and without dyſcreſcyon/ whiche the kyng Allyſander encloſed ther in/ and ben named goths or magoths/ or gog or magog/ they eat fleſſh all raw be it mē or women or beeſtys as men woode/ or demonyacks/ This Jnde of whiche I you reherce conteyneth. xiiii. regyons/ and in euerich of theſe regyons be moche people/ and alſo there is therin great trees of a wonderfull heyght farre paſſynge meaſure/ And there dwelleth people that ben horned/ and ben but two cubytes hye/ and they gone to gyddre in greate cōpanyes/ For ofte they fighte agayniſte the cranes/ whiche them aſſayle. But within. vii. yere/ they become aged and olde that they dye for age/ this people be called pigmaus/ nyghe vnto this cōtrey groweth peper al white/ but the vermine is ſo greate that whā they wolde gadre it they muſt ſet fire therin for to dryue away the vermine/ & whā it is brent/ the peper is foūden all black ſtorchid & criſpe/ there bē other people that be called groyne or bragmā/ that bē fairer thā they tofore named/ that for to ſaue an others life/ wyl put thē in to a fire. There is other people/ that whā their faders & moders or other frēdis be paſſig olde/ they ſlee thē & ſacrifie thē/ beſt wrōg or right & eat their fleſſhe & hold thē for very euyll & nygardes that ſo do not to their frēdes/ For they hold this maner amōg thē for great worſhyp & larges/ & therfore they vſe it

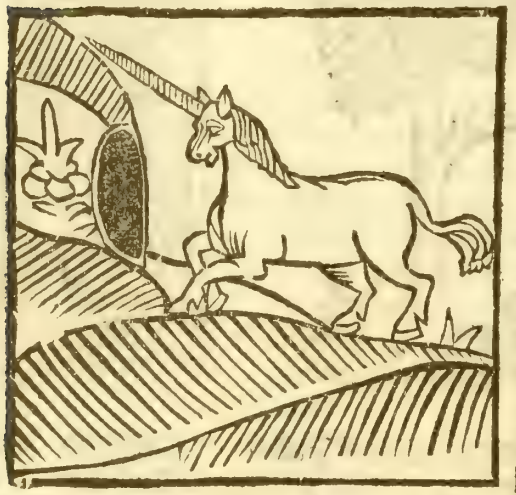
¶ Towarde the eaſt is a nother maner of people that worſhyp the ſonne onely and taketh it for theyre god for the greate goodes that come therby. And bycauſe that in all the worlde they ſe none ſo fayre a thynge to theyr ſemynge/they beleue in it as theyr god ¶ yet ben there other maner of people/the whiche ben all roughe which eat fyſſhe al raw e and drynk water of the ſalt ſee/Toward this ſame contrey is a maner of people that ben halfe beſtes and halfe men/yet ben there in that partye other maner of people which haue on one fote.but.toes/ In thyſe contreys is greate nomber of beſtys dredefull and terryble/which haue bodyes lyke men and he des of dogges/ And haue ſo great bngles or clawes that areſt all that they can holde and do clothe them with the hydes or ſkynnes of beſtes / And haue ſuche maner of voys as barkyng of dogges ¶ yet ben there other callyd Cyclopyens which paſſe by rennyng the wynde/and haue only but one fote/of whyche the plante is ſo ryght longe & ſo brode/that they couer them therwith fro the ſha dowe/whan the hete cometh ouer ſharp on them/Another maner of people there is/whiche haue onely but one eye/& that ſtandeth ryght in the myddes of the fronte or forehed which is ſo rede & clere that it ſemeth proprely fyre brennyng/ And there alſo ben founde an other maner of people that haue the vyſage and the mouthe in the myddle of theyr beſtes/and haue one eye/in euery ſholdre/and theyr noſe hangeth downe to theyr mouthe/And haue orelles a boute theyr moſell lyke ſwyne/yet bene founde toward the riuer of Gaunges a maner of ſtrange people and curteyſe/whiche haue the ryght fygure of a man/ which lyue only by the odour and ſmel lynge of an apple onely/ And yf they goferre in to ony place they haue nede to haue the apple wyth them/ For yf they fele ony ſtenche euyll and ſtynkyng & haue not the apple/they dye incontynent.



¶ Of the serpentes & of the bestes of Inde/ Capitulo. bl.

IN Inde ben plente of serpentes which ben of such hoꝛce and myght that they deuoure & take by strength the hartes & buckes/yet there is a nother maner of beste whiche is called Centicoꝛe. whiche hath the hoꝛne of a herte in the myddle of his face/& hathe the bꝛeste and thyghes lyke a lyon/and hath great erys & fete lyke a hoꝛs/And hath a rounde mouthe/his mosell is lyke the hede of a bere/And his eyen ben myghe to gydꝛe/and his voys is lyke the voyce of a man/An other beste men fynde there moche fyers/which hath the body of a hoꝛs/the hede of a wylde boꝛe/and the tayle of an Olyphant/And he hath two hoꝛnes whiche euerych is as long as a cubyte/& which he setteth that one vpon his back whiles he fighteth with that other/he is black and a moche terryble beste & meruaylous delyuere/And is bothe in water & on the londe/There be also sene bullys which ben al whyte/They haue great hedes/and theyr thꝛote is as wyde & bꝛode that it endureth from that one ere to that other & haue hoꝛnes that remeue aboute hym so that none may tame ne daunt the/Another maner of bestys there is in Inde that be callyd manticoꝛa/and hathe the vysage of a ma/& thꝛe huge great tethe in his thꝛote/he hath eyen lyke a gote/& body of a lyon

tayle of a Scorpion/and voys of a serpente in suche wyse that by his swete songe he draweth to hym the people and deuoureth them/And is more delyuere to goo than is a byrde to flye/ There is also a maner of oxen wyche haue theyr fete allrounde and haue in the myddle of theyr fronte thre hornes.



Here bene in Inde another maner of beste of mochefame corsage or shape of body which is called Monotheres/which hath the body of an hors/and fete of an Olyphant/hede of an herte & voys clere & hye/and a great tayle/& hath but one horn/which is in the middle of his fore hede/which is foure fote longe/ ryght and sharpe lyke a swerde/ cuttynge lyke a rasoure/And all that he atteyneth tofore hym and towcheth is broken & cutte/for trouthe this beste is of suche condycyon/that by what so euer engyne he is taken/ of great dysdayn he suffreth to be slayne and put to dethe/ But he may not be taken but by a pure byrgyn whiche is sette tofore hym where as he shall passe/the which muste be well and gentely arayed/Than cometh the beste vnto the mayd mochesymply/and slepeth in her lape/ and so he is taken sleppynge/

¶ In Inde ben there other bestes great and fyers whiche ben of blewe coloure/& haue clere spottes on the body/& ben so syghte stronge & crympnell that no men dare approche them/and bē named tigres/& they rōne so swyftly & by so great myght that the hunters may not escape fro thē in no wyse/but yf they take myrrours of glasse and caste them in the way where they shal ronne/For the Tygres ben of suche nature/that whan they se their semblaunce they wene that it be theire fawnes/than gone they aboute the myrrours so longe tyll they breke the glasse & se no more/ in whiche whyle the hunters escape from them that ben there.

And somtyme it happeth so of these tygres that they thynke so long and beholde theyr fygures that other whyle they be taken so lokyng all quicke and lyuynge/yet ben there other bestes which ben called castours/whiche haue this nature in them/that whan they be hunted for to be taken/they byte away theire own genytours or ballocks/and lette them fall/and thus they gelde them selfe/For they well knowe that for none other thynge they be hunted/Also there groweth another beste lyke a mous/and hath a lytyll mouthe and is named muske or muskalyet/In thys contrey ben the dyre trees that spake to Alexander the puyssaunt kynge/Another beste there is that men call Salemandre whiche is fedde & nouryssyed in the fire. This Salemander bereth wolle/of whiche is made clothe and gyrdles that may not brenne in the fyre/There be yet mycethe which ben as great as cattes and also swyfte in ronnynge/

¶ Towarde the oryent ben the lyons which haue more strengthe and myghte/in theyr brestes tofore and in all theyre membres than ony other beste hath/And they come to fede their fawnes the.iii.day after they haue fawned/as they that were dede and ben as reysed agayn from dethe and whan they slepe they hold their eyen open/& whan the hūters hunte them they couer the trase of theyre fete with theyre tayle/They shal neuer do harme ne greyef to man but yf they ben angred/And whan they be assayled they defende them/And whan he that kepeth them bete and chasty seth a lytyll dogge tofore them/they fere and doubte hym lyke as they knewe hym well/and the lyones hath the fyrste yere fyue fawnes and euery yere after folowyng one lesse vnto her ende so declynynge/There is an other beste whiche is lytell/and is so terryble and redoubted that no beste dare aproch it/and by nature the Lyon doubteth & fleeth fro hym/for oft it fleeth the Lyon//whiche is the moste noblest of all other bestes/as before is specyfyed.

¶ In this partye cometh ⁊ repayreth another beste whyche is of dyuers coloures of spottes as whyte/blacke/grene/blew ⁊ yelowe/lyke as it were paynted/and is called pã there/ and there cometh out of his mouthe so swete a sauour ⁊ brethe/that the bestys go folowynge after it for the sweteues of his body/ saue the serpent/to whom the swete smell greueth/ in suche wyse that ofte the serpent deth/and whan this beste is otherwhyle so fylled and full of venyson that he hath taken ⁊ eaten/ He slepeth thre dayes hole without awakynge/and whan he awaketh/he geueth out of his mouth so swete a sauour and smell/that anon the bestes that fele it seche hym/This beste hathe but ones yonge sawnes/ And whan she shal sawne/she hathe suche dystresse and angwysshe that she breketh with her nayles and renteth her matrice in such wyse that her sawnes come out/And neuer after whan the matrice is rente and broken they engender ne bryngeforthe sawnes/ There is a maner of mares that cõceiue of the wynde/and ben in a contrey named capadoce/but they endure not but thre yere.

¶ In this cõtrey be the oliphãtes whiche is a stronge and beste a fyghtynge/ And whan they se their blode shedde to forе them they be moste courageous and moste stronge and fyght in all places & all batayles/ vpon these olyphauntes were wonte to fyghte the people of Inde and of perse/ For an olyphaunt bereth well a toure of wode vpon his backe full of men of armes whan it is wel sette on & fermely/ And they haue to forе them in maner of a boyell great and large/ whiche they eat/ by which they renne on men/ & haue anon deuoured them/

¶ kyng Alexãder which was a good clerke and pryнce of great recomẽdacyon and that wente into many contreys for to serche and enquere the aduẽtures more than he dyd to conquere/ than whan he shoulde fyght agaynste them that had taught and lernyd tholyfantes to fyght in playn londe/ he dyd do make vessels of copper in fourme of men/ and did do fille them full of fyre brennynge/ and sette them tofore hym to fyght agaynste them that were vpon the olyphauntes/ And whan the olyphãtes caste their boyell by which they slewe the people vpõ the men of copper/ selynge that they were so hote that they brenned them/ Than they that were so taught wold no more approche them for lere of the fire/ for they thought that all men had bene as hote as they were of copper/ Thus kynge Alexãder as a sage pryce & conquerd the olyphantes and these wylde people and whan the olyphantes mete they kyndly entresalewe eche other with enclynynge theyr hedes/ ¶ They be tryght colde of nature/ for whan one putteth a lynnen clothe vpon theyre tothe and brennynge cooles

there vpon/the clothes shal not brenne/For as lone as the cole keleth the colde/he quencheth/the vuory is so cold/the tothe of an olyphãt is vuorye/The olyphauntes haue neuer yonge sawnes but ones in longe tyme/and they bere them two yere in their flankes/an Olyphaunte lyueth thre hondred yere/He doubteth & fereth the wesell & the addre/& dredeth vermyne/yf the addre clene & be on the Olyphaunt/it departeth not tyll it hathe slayne hym/ the sawneth her sawnes & hydeth them where no wode is/& sawneth in the water For yf she laye on the erthe she sholde neuer aryse ne releue/ for bymoche their bones ben all hole without any ioyntes from the bely vnto the fete/& whan the olyphaunte wyll slepe/he leneth vnto a tree & there slepeth stondyng/The hũters that seche them & knowe the trees to whiche they lene whan they slepe/that whan they haue founde them/they sawe them lowe by the grounde almoste a sõder/that whã tholyphãt cometh & knoweth nothyng therof and wold slepe/anon he falleth with the tree vnto the groũde & may not releue hym selfe/thã begynneth he for to braye and crye/that some tyme there come many olyphãtes for to helpe hym/And whã they may not reyse hym they crye and make great sorowe/And they that be smalleste go aboute for to reyse him/but whã they cã not reise hym they go their way criẽg and leue hym/and the hũters come and take hym/by this subtylte be the olyphauntes taken/

There be in Inde the basiliscocks which haue the sight so benymous that they slee al men/and so do they al foules and beltes/he hath the hede lyke a cocke/and body of a serpente/he is kynge of all

ſerpentes/lyke as the lyon is kyng aboue al beſtes/he is white rayed here and there/There is nether herbe ne fruyte wherby he ſhall paſſe/ne the trees that be plãted but they ſhall perylſhe/yf he haue byte or ſlayn beſte or other thyng/ſo maner of beſte dare approche it.within the ryuer and flode of Inde named Ganges goon the Elys by great rẽges which be. C C C. fotelõge & be good meat at nede/Many other beſtes perylleus & terryble ben their in indeas dragõs/ſerpẽtes/& other diuers beſtes which haue fete/hede & tayles right monſtrous/in this regiõ be other maner of ſerpẽtes that haue hornes like ſhepe/ There is a beſte named aſpis that may not be deceyued ne taken but by charmyng/for he heeryth gladly the ſown/but aſſone as he herith the charm/he putteth his taile in his one ere/& that other leieth to the grouñde doubtyng to be deceyued by the charme/Other ſerpẽtz there be named tigris which be taken quyck by force of engyns/and of them mẽ make triacle which deffeteth and taketh away other vermyne.

Other wormes there growe which haue two armes ſo longe & ſo dyuerſe that they bete and ſlee the Oliphañtis. This worme lyueth ryght longe/ And whã he is olde and feleth hym feble/he conſumeth hym ſelfe by faſtyng/ And ſuffreth to be enfamyned ſo moche that lytell abydeth of his body/ Than he goeth into a lytell hole of lomme ſtone whiche is well ſtrayte and than he putteth hym ſelfe out with ſo ryghte greate dyſtreſſe/that his ſkynne remayneth all hole/and ther groweth and cometh on hym another ſkynne/And thus renewethe his age as a wyſe beſte as he is/There be plente of other ſerpẽtes that haue many precyous ſtones in their hedes & eyen/ the whiche ben of ryght great vertue for them that myght haue them and bere them/Now we ſhal deuyſe to yow of ſtones that growe in Inde and ben there founden/

Here speketh of precyous stones and of their vertues which growe in Jnde/ Capitulo. vii.

IN Jnde groweth the admonde stone/which is a stone charged with many great vertues/she by her nature drawe th to her yron/and maketh it to cleue to it so fast that it may vneth be taken fro it for the vertue that is in it/The dyamond groweth also in Jnde al hole/and it may not be broken in pyeces ne vsed/without it be by the vertue of the blode of a gote al hote/yet growe there other maner of stones of many dyuers facyons and vertues the which ben of moche recomendacyon/renowne/and of moche fayre vertue/and first J wyl speke of the emerawd which is so pleasant to the eye that it conforteth all the syghte of hym that it beholdeth/ Jnlyke wyse groweth in Jnde an other stone the which is called Carboncle/the which by nyght/or if it be in darke place and obscure it shyneth as it were a cole brennynge/also there growe Saphyres which by theyr vertue take away the swellynge and redenes of the eyen/ There groweth also a stone called topace which is of coloure lyke vnto fyne golde and also is of hye vertue/yet also there

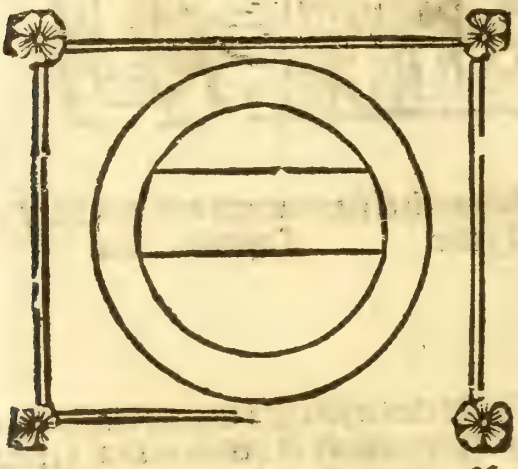
growe rubyes whiche is a stone moche preysed and loued amonge the people/ & is also of ryght moze greate valewe and vertue than is the topace/ he reioyceth the sight and confoztethit moche and spe cyally to them that bere it/ yet ben there also in Inde plenty of other maner stones whichhaue in them moche fayr vertues & boũtes/ and who that woyll moze knowe of theyr vertues & bountes maye rede in the boke called Lapidarein which he shal knowe the names & vertues/ Ioz now at this tyme we shall make an ende of this mat ter/ toz to recounte you the contreys & royalmes of Inde/

¶ Here folowethof the contreys and royalmes of Inde Capitulo. viii.

IN Inde is plente of great contreys right meruayloussly whi che ben peopled with dyuers maner of people and of greate plente of bestes of many dyuers facyons and condycyons/

¶ Amonge all there is a contrey named Perse & conteyneth.xxviii. regyons of whiche the fyrst is the royalme of perse/ whereas a scy ence called Nygromancye was first founde which scyence constrai neth our enemythe fende tobe taken and holde pzysoner/

¶In this contrey groweth a pese whiche is so hote that it scaldeth the hãdes of the that holdeth it/& it groweth with encrehyng of the mone & with wanyng it destresseth at eche tyme of his cours. It helpeth well to them that be nygromancyers/¶After this realme is another which is called Mesopotamy/wherin Nynyue a cyte of great seniourye and myght is sette and establysshed/which is thre dayes iourneys of length and is moche large & brode/In babylone is a toure that somtyme was made by greate pryde of whiche the wallys ben meruaylously greate/stronge/and/hye and is callyd the toure of babylone/It is of heyght rounde aboute .iiii. M. paas vnto the hyeit/In the regyon of Caldee was first founden Astronomy ¶In this regyon is the land of Saba/and therby is the regyon of Tarse/And after is that of Arabye of these thre regyons were lordes and pynces the thre kynges that offred to our lorde & sauyour Jesu Cryste golde/Encence/& Myrre/That tyme whan he laye in the Crybbe after his blessyd Natyuyte as he that was the sonne of god/And this knewe they by their great wytte and vnderstanding of Astronomye in which they were endowed and founde/¶In this regyon of Araby groweth the Encence and the Myrre/And there ben therin many people/and dyuerse folke/There is also in Egipte a regyon which is called allyrye/



¶Ther is also the regyon of Fenyce/ the whiche taketh his name of a byrde that is called fenyx/of whiche in all the worldes on this day but onely one a lyue/& whãne dyeth anon there groweth another of hym selfe/He is great and moche fayre of corsage & hath a creste on his hede/lyke as the pecocke hathe/The breste and the gorge of hym shyneth and drawyeth towarde the propre coloure of fyne golde/And he is alonge the backe as rede as a rose/and towarde the tayle he is of the colour of asure lyke vnto the heuen whan it is pure and clere/& whan he is olde and aeged he withdrawyeth hym vnto an hye and meruaylous fayre place or moũtayn where as sourdeth a fontayne ryghte

great and large/and the water fayre and clere/and ouer the well groweth a fayre tree and great/which may be sene fro ferre & he maketh vpon this tree his nest and his sepulture/ryght in the middle of the tree/But he maketh it of spyces of so ryght great odour that there may be founde no better/And after he addresseth hym in hys nest whan he hath all perfourmed it/than he begynneth to meue & to bete his wynges agaynst the sonne so fast and so long that a grea te hete cometh in his fethers in suche wyse that it quyckeneth al on fyre & brenneth al roūde about his body that he is on a clere fyre/ And thus the fyre brenneth & cōsumeth hym al to asshes/and out of these asshes & pouder groweth another byrde lyuynge sēblable to hym/After this regiō of fenyce is the realme of Damas where as good fruytes growe/And after Damas is founde the regiō of Anti oche where as be foūde plēte of Camels/After cometh the contrey of Palatyne/& after that Samary/than Sebaste/and than Pentapo lye/where sometyme were founded two myghty cytees/the one cal led Sodome & that other Gomor/the which god wold they shulde perysshe for the great & enorme synnes that they commysed/on this party is the dede see in which is nothynge that bereth lyfe/there is a contrey that men call Ismaelyte/which is enhabyted by.xii.ma ner of people/& after this than is Egipt the great where it nourrey myth/and conteyneth.xxiii.people/

Another regyō there is the which cometh towarde the northin which there dwelleth no man but women which be ne as ty ers as lyons/and whā nede is they fyght fely against the men. They go armed as knygh tes in batalle and bryng down their enemyes without sparynge/they ha ue fayre tresses of their here whiche hange downe behynde them/and they be garnyl

ched with great prouesses in all their workes & assayres/And bene called Amazones/Bi. they haue men nyghe to theyr contrey dwelyng/whom they euery yere fetche for to be in their cõpany/viii.or xb.dayes long and suffre them to knowe them carnally so long that they suppose that they haue conceyued/and than departe the men fro that contrey and gone agayne theder where they come fro/and whan these women haue chylded/yf it be a doughter they retayne her with them/And yf it be a sonne they nourysshe it fyue or syx yere and after sende it out of the contrey/yet in other places ben many fayre ladyes whyche in batayles and in estours vse all theyre Armours of syluer for lacke of yron & of steele/of which they haue not ¶In the wodes of Inde ben other women the which haue their berdes so longe that they come down to their pappes/¶They lyue by wylde beestys/and clothe them wyth the skynnes of the wyld beestis/And there ben men and women all naked & also roughe as beres and ben dwellyng in caues in the erthe/and whan they se other mẽ they hyde them in the caues so that they appere not out/Other people there ben that ben also roughe as swyne and whynynge/ And there ben other women roughe also lyke vnto the men/ but they be moche beestyall & whyte as snowe/theyre tethe bẽ more lyke vnto houndes than to other and dwell and abyde well in the water/ Another great regyon there is in which dwel.xliii.maner of people there ben the byrdes which ben ful of deduyte/of whom the pennes shyne by nyght as it were fyre/

¶There ben popengayes which ben grene and shynynge lyke pecockes which ben but lytell more than a Jaye/of whom as men saye/they that haue on eche fote/fyue clawes ben gentyls/and the vyllaynes haue but thre/ he hathe a taile longer than a fote/and a becke courbed and a greate tonge & forked/who that

myght haue one he myght well lerne hym to spekē in the spacē of. ii. yere/ Another byrde there is in this contrey whichis named pel lycane/and al houres whan he leueth his chykēs & cometh agayn to fynde them as is of nede/hym semeth that they ben all dede/ ¶ Than he smyteth hym selfe with his bylle in hys brest tyll that the blode spynge out/wherof he reyleth agayn to lyfe his byrdes/ In armenye is a maner of people that haue all theyr here whyte/

¶ In these partyes is a moche hye mountayne where vppon the arke of Noe abode and rested after the flode was passed/after Cometh the prouynce of Inde the lasse which is all enuyronned with the see wherin be many regyons of whom for this presente tyme we wyll not declare the names/ In this pro uynce of Asie is the regyō of dardain/And the cōtrey of Frygye into which pa rys whan he had rauysshed helain brought her to wher fore the puyssaunte cyte of Troye the great was at the emprise of the grekes destroyed by fyre and glayue/This cyte was sette at one of the en des of grece/ In this party is sette the noble cyte of Lychaony/And nygh to that stōdeth another Cyte called Cayer by which ereuneth a great see named Herme of which the grauellis of golde/ Fro this parte towarde thende of Egipte cometh to vs the payaoyle which is of fyne golde/ There is toward thorient on that other side a maner of people that be descendyd fro the Jewes/ and all theyr condycy ons be vyle / foule/ and stynkynge/ they haue no wyues wedded/ nor holde no concubynes/ nor other/ for as moche they maye ne can

not byleue that women may holde them to one man only without to double them with other/And therfore they sette no store by wom̄ but onely that they may haue generacyō/Another maner of people there bē in this prouynce which be called barbaryns/and ben also called Jacobyns/For Jacob was aūciētly their master/& be chrystē mē corrūpted by the mariages & aliāces that they do & make with the sarasynes which on that one syde marche on them/These barbaryns pourpryse wel.xl.realmes/In no wyse they beleue that confessyon be vayllable to shew it to any man saue to god only/wh̄ they confesse them to god/they sette by them fyre and encence/& they wene certaynly that their thoughtz go vp to our lorde in this fume but it is not so as they byleue/but they mysbyleue sayntē Johñ baptyste the which fyrste babtyzed them/For tofore all thynges they be houed to say their sinnes to hym self/And after they receyued of hym baptesme/forseynt Johñ baptyst sayeth that whan one telleth his synnes to another that may be a sinner as he is/this shame that he hathe to say his sinnes is tourned to hym in stede of penaūce/

¶In this regiō is another maner of people Crysten that beleue alytell better in god and ben stronge and myghty in batayle/The sarasynes doubte thē moche and dare not mysdo them but be to thē good/these people be named Georgyens and be enclosed rounde a boute with mysbelyued people/and they be called georgyens bycause they crye alway on saynt George in batailes/in estours and in encountres agaūste the sarasynes/

¶And also they worshyppe and loue hym aboue all other saynctes/ They shaue all crownes shauen on theyr hedes/but the clerkes haue them hole rounde/and the laye people haue them square/ wh̄ they go to Jherusalē for to worshippe the holy sepulture of our

lorde Jhesus/The sarasynes dare not take of them ony tolle nè no thynge hurte them bycause they doubte that whan they come and repayre agayn they sholde abye it dere//The gentyll ladyes of the cō trey arme them & ryde vpon good horses rennyng and swyfte/and fyght aspirely in the cōpany of the knyghtes of george agaīst the sara synes/they vse lawes/& lyke termes of speche as done the grekes.

¶ Here speketh of the fysshes that be founde in Jnde. Ca. ix.

IN the see of Jnde is a maner of fysshes that on theyr skines grow here so lōge that the people make thereof robes & other vestumēt/ which they were whā they haue takē & made thē/yet ther is another maner of fysh in this see which is named sturnuz which be no longer thā a fote/but they haue such strēgth that assone as they touch a shyp tone alone retetneth him styl that he may not go forward ne backward/There be other fysshes that be called dolphyns/they haue a custome that whā they fele that the tēpest shal com/and that the shyppes be in daūger for to be lost and perisshed/they warne thē out of the water/& shew & play on the wawes of the see in such wise that sometyme they be playnely sene/

¶ In this see of Inde is an other fysshe so huge and great that on his back groweth erthe and grasse and semeth properly that it is a great Ile/ whereof it happeth somtime that the marynyers sayling by the see ben greately deceyued & abused ¶ For they wene certaynly that it be ferme londe/ wherfore they go out of theyre shippes theron/ and whan they haue made it to brenne after theyre nede wenynge to be on a ferme londe/ incontynent as this meruaylous fysshe feleth the hete of the fyre/ he meueth hym sodeynely and dyueleth downe into the water as depe as he maye/ And thus all that is vpon hym is lost in the see/ And by this meane many shyppes ben drowned and perysshed/ and the people whā they supposed to haue be in sauetye/

¶ There is in this see plenty of other fysshe the which haue hedes and bodyes lyke vnto a mayde and haue fayre tresses made of theyre here/ the shape of theyre bodyes vnto a mayde/ and the remenaunt as lyke the body and tayle of a fysshe/ and some haue wynges lyke foules/ and theyre songe is so swete and so melodious that it is meruayle to here & they be called seraines or mermaydens/ of whom some say that they be fysshes/ & other

say that they be foules which flee by the see/ but take it a worthe/ For at this tyme I shall depoxte to spebe moze of this mater for to tell & recounte to you of the manaylous trees that growe in Inde of whiche ben many dyuers and bere sondzely frupte as hereafter shall be declared to you/

¶ Here folowyth of the trees that bene in Inde and in Asya and of theyr vetues & fruttes. Capitulo. xl.

IN Inde groweth a tree moche greate and ryght fayre/and is moche swete smellynge and is called palmyer/and bereth dates/this frupt is good and holsome/ ¶ There ben also apple trees the whiche bene full of longe apples whiche bene of meruaylous good sauoure/ And they cleue to gydze well an hondzed on a clustre/and the leues that growe on these apple trees be well two fote longe/& a fote brode/ ¶ Other apples there growe moche greate wherin appereth the bytte of a man with his tethe/and be called the apples of Adam bycause of the bytte that appereth in the ¶ There ben other trees which bere apples/that bene ryght fayre

wythout/And within as it were aſſhes/The vynes bere there gra
pes of whych wyne is made/they ben ſo habounndaunte of fruyte/
And the cluſtres of grapes bene ſo great and ſo full of muſte/ that
two men be greately charged to bere one of thē onely vpon a ſtaffe
Alſo there growe lytyll trees that be remeuyd euery yere the which
bere cotton/alſo there growe in many places canes which be great
& long & be wythin ful of Sugre/ſwoche/& eſpecial that there gro
weth none ſuche in all the worlde/ At one of the hedes of the roy
alme of Babylon groweth the bame which is moche dere/and chry
ſten men that ben pryſoners there delue and laboure the erthe/
¶And ſaraſyns ſay that they haue ofte preuyd it/that whan they
do delue and labour that erthe with people of other nacyons than
cryſten men that it bereth no fruyte nor bame that yere/And vpon
the felde where the bame groweth/ſome ſaye that there ſpryngeth a
fontayne where the bleſſyd vyrgyn Mary bayned her ſone Jeſus
And with the water of this fountayne is the bame watred/and of
this water may not be employed ne borne in to other place/For in
ſubſtauuce it doth no more than other water/¶In this cōtrey bene
other trees the which in ſtede of leues bereth woll/of which is ma
de clothe ryght fayre and ſubtyll/of which the enhabytauntes of the
contrey make them robes and mantels for theyr werynge/yet bene
there other trees that bere a fruyt ryght ſweteſmellyng/But this
tree taketh his fruyte by nyght in hym/and in the mornynge it com
meth out agayne whan the ſonne ſhyneth/ There growe plentye
of other trees/of whome the coles whan they ben on a fyre dure in
theyre aſſhes an hole yere without goynge oute/or quenchynge/
or mynyſſhynge/ ¶Alſo there growe plenty of Cedres &
of Lybans/the which as men ſay may not rotte/ Other maner of
trees there growe moche gloryous and ryght goodly whiche bere
clowes/and other that bere nutte megges/And of the rynde & ſcorce
is the canell or ſynamon made/ ¶And alſo there groweth
gynger/ In theſe partyes grow the good ſpyces of alma
ner habounndauntly/ ¶Alſo there growe nuttes whiche
ben alſo great as greate apples/And other that bene as greate as
the hede of a man/ ¶To the regarde of the trees that be in
paradys terreſter we knowe not what fruyte they bryngе forthe
but it is well knowen of the tree that Eue had ſo great deſyre to eat
aboue the comaundement of our lorde god/and of which ſhe decey
ued Adam our fyrſte fader and in lyke wyſe is there the tree of lyfe
of which we haue ſpoken tofore more largely/

There be in this paradys so many other trees beryng fruyte so good and so delycyous that it semeth that the glorye of our lord be therin ouerall/ But the angel of god is kepar of the gate with a naked swerde in is honde contynuelly brennyng to thende that no man ne bestes ne euyll spyrytes approche ne auaūce them for to take in ony wyse theyr delytes & playsauuces /and to accomplissh them therwith in/ And here with we make an ende of this purpose/

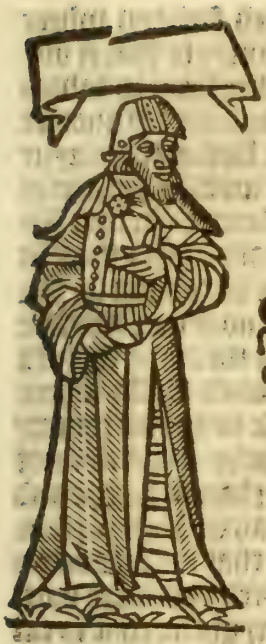
Here foloweth of Europe and of his contreys. Ca. vi.

Syth we haue deuysed to you of Asye and of hys contrees & regiōs/ I shal say to you of Europe & his cōditions shortly. For as moche as we may ofte here speke therof/ The fyrst partye of Europe is romanye & a parte of Constantinople/ Trapesōde/ Macedone/ Thessalye/ Boheme/ Saxonye/ pyrre/ & a holsom contre named Archade/ In this contrey spryngeth a fontain in whichmē may not quenche brennyng brōdes/ ne cooles of fyre/ In archade is a stone which in no wyse may be quēchyd after it is sette on fyre tyl it be brent in to asshes/ After that is the Royalme of Denmark & Hongary/ & Hostetich/ & than Germany which we cal Almayn/ which conteyneth moche toward thoccident In whych ben many puissāt realmes/ There spryngeth a ryuer named dunoe/ which strecheth vnto Constātynoble/ & there entreth into the see/ But fyrst it trauerseth .vii. gret flodes/ As I herde say the hede of this dunoe begynneth on one syde of a mountayne/ & that other side sourdeth on another ryuer which is called the Ryn & rōneth thrugh almayn by basil. strasburgh/ Magoūce/ Coueleuce/ Coleyn/ & nemyng/ where fall by it depeth to .iiii. ryuers/ & rōneth thrugh Cleue/ ghelders/ & Holande & so into the see/ And fyrst entre i to a ryuer named the Yase/ In Europe is also Swauen/ Wasse/ Almayn/ fraunce/ Englonde/

scotlande/ & Irlonde/ & aboue these many other contreys which en
dure vnto the mounte Jus/ & thus moche space holdeth the party
of Europe. Now shal we declyse to you how moche affryk cōteyneth.

¶ Here foloweth
of affryke & of his
regyōs & cōtreys.
Ca. xl.

After Europe is affryke of which the regyō of Lybe is the
fyrst / It is a londe moche ryche / well peopled and strong
gly garnysshed / After cometh the realme of surrey / and Je
rusalem and the contrey rounde about / this is the holy land
where our lorde Jesu Cryste receyued our humanyte & passyō / &
where he arose fro deth to lyfe / after the opynyon of some is that this
holy lande longeth to Asye / After that cometh Grece / Cypres /
cycyle / toscane / Naples / Lombardye / gascoyne / spayne / catelonye /
Galyce / Nauerre / Portyngal / & Aragon / And how be it that the
auctour of this boke sayth that these contreis be in Affryke / yet as I
vnderstonde althys ben wythin the lymytes and bounes of Eu
rope / Also there be some of these regyons and contreys that taketh
theyr name of somme beestes that dwelle in the same londes / and
the cytyes haue taken the fourmes / as rome hathe the fourme of a
Lyon / And Troye the great of an hors &c. All Barbarye is in Af
fryke and Alysaunder / and ethyope stretcheth vnto thende of Affryk
in this contre of Ethyope the people ben black for hete of the sone
For it is so hote in this courey that it semeth that the erthe shoulde
brenne beyonde Ethyope is no londe but deserte / and londe wyth
out bryngynge forthe of ony fruyte / but it is full of serpentys / of ver
myne and of wylde beestes / whyche londe endeth at the great see /



¶ Here shal we speke of dyuer
se Iles of the see/
Capitulo. xiii.

¶ Sith we haue declared and deuised the londe/It is re
aſō that we ēquyre of the yles of the see/& ineſpecyal
of thē that we know the names/of which there be plētyin the see.
¶ There is a moche great yle called Andos which is towarde Eu
rope/& syth is the yle of Colchos/where as the fleyce of golde was
founde lyke as to vs reherseth the hyſtoyre of Jaſon/There is ano
ther yle called Paron/In this yle was borne the holy man saynt de
nys which receyued martyrdome in fraunce/Toward aſye the gre
at ben the nombet of.xliii.yles.There is one yle named delos/this
yle appyered fyrſt after noes flode/There is another yle named me
loth/and it is so called for the ryght great melodye that is herde ther
in of swete songe of byrdes that be in this yle/contynually in thys
yle groweth plenty of whyte marble/There is a nother yle in thys
contrey that is called pſalmos in which the quene ſybyll was borne
the which prophecyed of many thynges of our lorde Jeſū cryſt long
tyme before he was borne of the vyrgyne marye/& the prophecied
these thynges at Rome/where she was sent for/¶ In this yle was
fyrſte founde the maner to make potter oi erthe/which ben yet vſed
in many contreys/In this yle was borne a great philoſophre and
a good clerke named pitiogoras/the which by his great entedemēt
founde the poyntes and the dyfference of muſycke/

¶ In affryk is also an yle in the see which is called sardayn where an herbe groweth whiche is of suche vertue and myght that yf one eat of it he dyeth incōtynent all laughyng/ Another there is which is named bosut where is no serpēt ne vermine/ and there is another whiche is called colombyne/ where as is greate foyson of vermyne and meruaylous serpentes/ ¶ yet there is another yle that is moche longe and ryghte brode that is called alleares/ In this Ile was fyrst founden the maner of meltynge of metallys/ Also there is the yle of Meroes the which at the myddle of the daye hathe no shadow/ yet there is a pitte in this yle that by ryght nombre & measure is .vii. fote brode/ and an hondred fote depe/ And the sonne shyneth in the bottō/ Also there is another yle which is called Cylla where the Cyclopyens were somtyme/ ¶ Another yle is in this contrey so great/ as the wyse Plato wytnesseth the whiche was a clerke of great renowne/ the whichyle hath more space than al europe and affryke conteyne/ but syth the tyme of plato it was in suche wyse destroyed and broken lyke as it pleasyd our lorde that it sanke down into Abisme for the great synnes that they cōmysed that were dwellers and enhabytautes therin/ and is now the ryght see that is called bethee/ ¶ There is yet another yle the whiche may not be sene whan men wolde goo therto/ but some go theder as men saye/ and it is called the yle lolle/ This yle founde sayntе brandon the whiche beynge therin on ferme londe sawe and founde many marueyles lyke as his legende conteyneth/ and who that wyll knowe it may by syt this legende and rede it/ ¶ In the marches hetherward be founde many goodyles/ The yle of Cypres & of Cecyle and many other that be founde in the see/ of which now I speke not/ ¶ And be not admaruayled of suche thynges as ye haue founde wryten in this boke/ the which may seme to you moche strange/ dyuers/ & moche dyfycyll to byleue for our lorde god which is almyghty maker and creatour of all thynges/ and in whome all goodes and vertues ben/ hathe made by his onely wylle and pleasure in the erthe many marueyles & many worckes to be marueyled on bycause that no man knoweth by no waye the reasons wherfore/ and therfore we ought not to mysbeleue in no wyse that we here redde ne tolde of the marueyls of the worlde vnto the tyme we knowe it be so or no/ For the worckes of our lorde ben so hye and to the mē so dyfycyl & hard that euery man may reporte hym to that that it is/ how be it a man doth not moche amys somtyme to gyue no byleue to some thynges whan he knoweth not the trouthe so that it be not in errynge

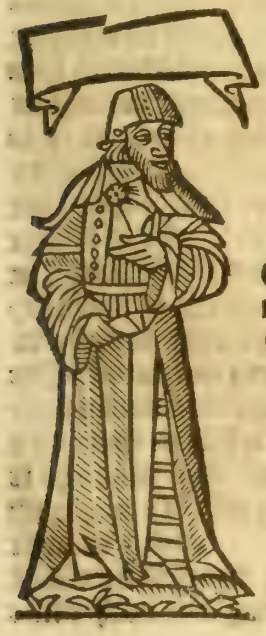
agaynſt the fayth/for it is a good and a profytable thynge to euery man to vnderſtande and retayne to the ende that he may lerne/of which he be not abaſſhed whan he hereth ſpeke of ſuche thynges/& can anſwere to the trouthe/for inlyke wyſe as to vs ſemegreat marualle of thynges that I here reherce/In lyke wyſe ſemeth it to thē that ben ferre fro vs/that the thynges of theſe contreys ben moche dyuers & ſtrange and meruayle greately bycauſe they haue lytyll ſene of it/And therfore a man ought not to meruayle yf he here ſō tyme any thyng though he can not vnderſtonde the reaſon/for al way a man ought to lerne/

¶ And ther is no man that knoweth al ſaue only god whiche all ſeeth and all knoweth/The Gyauntes that be in ſome place haue tyght great meruayle of thys that we be ſo tytyll agaynſte them/ Lyke as we maruayle of them that ben halfe leſſe than we be/As it is tofore ſayd /and they ben the/Pygmaus whiche ben but.iii. fote longe/And in lyke wyſe meruayle they of vs ot that we bene ſo great/& repute vs alſo for geauntes /They that haue but one eye and one fote/haue greate maruayle that we haue twayne/lyke as we do of them that haue but one /And alſo as we deuyſe theyr beſtys and name them by their names in lyke wiſe deuiſe they ours by theyr tes /both of body and of membres/ yt the centycore haue a fote of a hors/In lyke wyſe hath the hors the fote of a centycore Alſo we may well ſay that the hors hath the body of monotheres. for they be lyke corſage/And thus theyre beſtys reſemble vnto ours which ben dyuerſe of hedes of bodyes and of membres/as oures be contrary to theyrs/

¶ Of dyuerſytes beyng in Europe & in Affryke/ Capitulo. xliii

I haue in these partyes many thynges that they of Alye & of Aufryk haue none/ ¶ There is to wa-
de Irlonde on one syde a maner of byrdes that flye &
they growe on trees and on olde shyppes sydes by the
bylles/and whan they be nyghe rype they that fall
in the water do lyue/and the other dye/they be called barnacles/
¶ Irlande is a great Ilonde in which is no serpente ne venymous
beste/and who that bereth with hym the erthe of this Ile in to a
nother contrey & leyeth it where as venymous beest ne is/anon
it dyeth/Another Ilonde is in Irlonde which stondeth fer in the
see/where no wymmen may dwelle/and also the byrdes that ben
females may not abyde there/ ¶ There is another Ile wherin no
mā may dye in no tyme of the worlde/but whan they ben so olde &
feble that theyr membres fayle and ake and lyue with greate payne
that they may not helpe ne sustayne them selfe/and that they had le
uer dye than lyue/they do them to be borne in to another yle & ouer
the water for to dye/and trees that ben in thys yle kepe theyr leues
grene and in verdure all tymes of the yere wynter and somer/ ¶ In
another yle in Islande the nyght endureth .vi. monethes/& than
cometh the daye that dureth other syx monethys shynynge fayre &
clere/Another place is in the same ylonde whyche brenneth nyght
and daye/ ¶ There is also in Irlonde a place called sayntpatry-
kes purgatory/which place is perillous yf ony men goon therin &
be not confessed and repentaunt of theyr synnes/they be anon ra-
uysshed and loste in suche wyse that no man can tell where they be
become/And yf they be cōfessyd and repentaūt/and that they haue
done satysfactyon and penaunce for theyr synnes without that all
be clensed and fulsatysfyed ther after shal they suffre payne & greef
of tourmentys in passynge this crymynell passage/And whan he
is retourned agaynfrothys purgatorye/Neuer shal no thyng in
this worlde please hym that he shall se nor he shal neuer be ioyous ne
glad ne shal not be seen laughe/but shal be contynuelly in wayl-
ynges and weppynges for the synnes that he hath cōmytted/it may
wel be that of auncyent tyme it hath ben thus as afore is wryten
as the story of Tundale and other wytnesse/but I haue spokē with
dyuerse men that haue ben therin/And that one of them was an
hye chanon of waterforde which tolde me that he had ben therin
.xv. tymes and he sawe ne suffred no suche thynges/he sayth
that with processyon the religyous men that ben there bryngе hym
in to the hool and shette the dore after hym/and than he walketh

groppynge in to it where as he sayde ben places & maner of couches to reste on/and there he was all the nyght in contemplacyon & prayer/and also slepte there/& on the morne he came out agayne/other whyle in theyr slepe some men haue meruaylous dremes & other thynges saw he not/And in lyke wyse tolde to me a worthy knyght of Bzudgys named syr Johñ de banste that he had bē therin in like wyse and se none other thynge but as afore is sayde/In Bzytayn that now is called Englonde as is sayde is a fontayn and a perron therby/and whan men take water of this well and caste it vpon the perron/anon it begynneth to rayn/and blow/thunder/and lyghtē/meruaylously/Also in fraunce hath be sene somtyme a maner of people that haue be horned/towarde the mountes of mounte Jus/ye shall fynde plenty e of women that haue botches vnder the chynne which hange downe of some to the pappes/and they that haue greatest be holde for fairest/Other folk there be that haue botches on their backes & bē croked as crochett z/& they that se al these ofte meruayl but lityl/also it is ofte sene that in this contrey be borne childrē deke & dōbe/& also of them that haue bothe nature of man & woman/yet ben there ofte sene some chyldren comen into this worlde some with out handes and some without armes/



¶ Of the maner & condicyon of beestes of these contreys. Capitulo. xiii.

¶ The fox is of suche a condycyon that whan he departeth fro the wode and gothinto the feldes/there he lyeth downe and stretcheth hym on the grounde as he were deede/for to take byrdes/ ¶Whan the Herte wyll renue his age he eateth of som venymous beste/If the tode/Crapault/or spyncop byte a man or womā/they be in daunger for to dye/it hathe ben ofte sene/ ¶The spyttle of a man fastyng sleeth con:ynly the spyncoppe and the tode if it touche thē. ¶If a wolfe & a māse the one the other fro ferre/he that is first sene becometh anon afrayde/the wolfe bereth the shepe withoute hurtynge or greuynge hym doubtynge that he wolde crye/& that he sholde be folowed/& after deuoureth hym whā he hath brought hym to the wode/and yf he be constrayned to leue hym in his berig he destrayneth hym with al his might at his departynge/ ¶The spyder or spyncoppe of his propre nature spynneth and weueth of his entrayles the threde/of which he maketh his nettes for to take flyes whiche he eateth/ ¶Whan the shepe hathe two whelpes or fawnes she loueth that one moche better than that other/She bereth hym that she loueth beste in her armes/and that other she letteth goo/whiche whan she is hunted lepeth on the moders backe and holdeth her faste/And that other that she bereth in her armes she letteth fall and is ofte constrayned to saue her selfe/Also it is so that the houndekepeth the goodes of his mayster or lorde/and ben by hym waranted agaynste men and bestes/and aboue all other he knoweth his lorde and maystre by his smellynge/and loueth hym of so ryghte good loue that ofte it happeth be it ryghte or wronge he wyll not forsake his mayster vnto the dethe/And also he is so sorowfull for the dethe of his mayster/that otherwhyle he loseth his lyfe. In englonde in some place is there a maner of houndes that gone and seche oute the theuys/and brynge them fro thens where they founde them. The muskell is a ryght lytell beste and sleeth the Basylycocke/and in longe fyghtynge byteth hym out of measure/ She of her nature remeueth so ofte her fawnes from one place to another that with greate payne they maye vnneth be founde/The hyrchon whan he fyndeth apples beten or blowen downe of a tree/ he walweth and tourneth hym rounde about tyll he be charged & laden with the fruyte styckynge on his pryckes/ And whan he seeth hym selfe ladē as moche as he may bere/he gothe his way with them syngynge and maketh his deduyte/ And yf he mete any beste that wolde do hym harme/he reduyleth hym selfe as rounde as a boule/and hydeth his groyne and al his feete/and doth arme

hym with his pryckes aboute his skynne in suche wyse that no beste dare approche hym for doubte of his prickes. ¶The lambe whiche neuer saw wolfe of his propre nature doubteth and fleeth fro hym/ But he doubteth nothynge other bestes but goeth hardely amonge them.

¶Here foloweth of auyseres of his regyos & cõtreys. Ca. xlv.

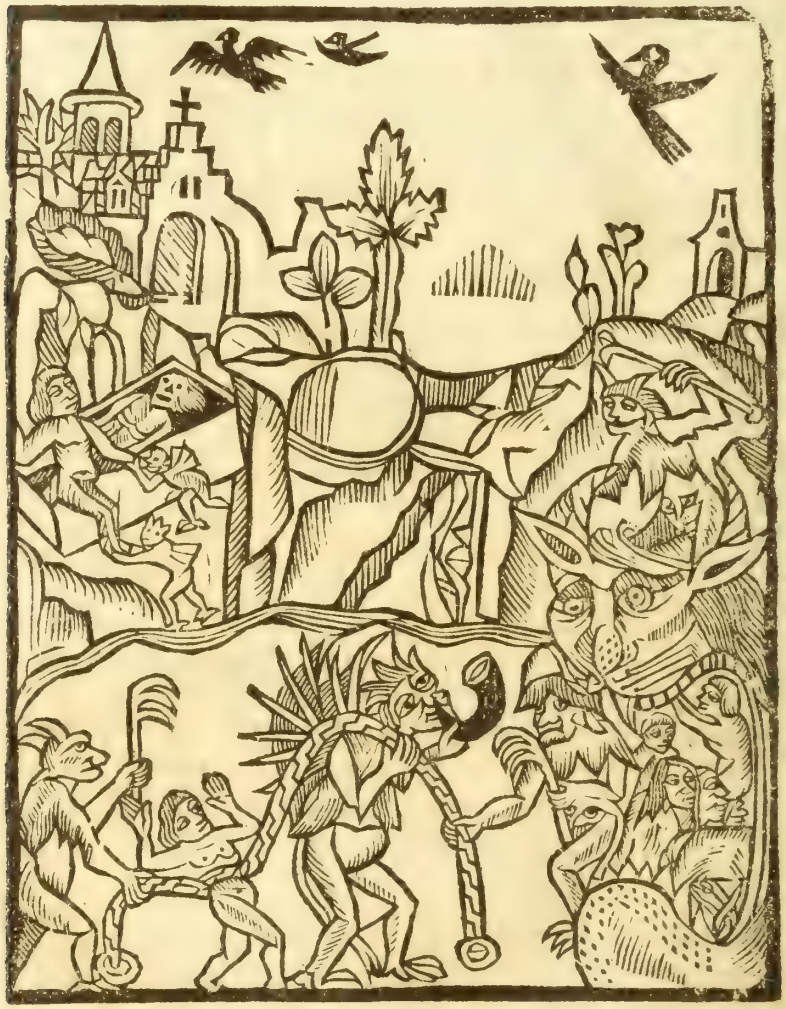
THe Egle is kynge of al byrdes lyke as the Lyon is kynge ouer all bestes/ ¶The Egle of his nature taketh his byrdes by the vngles or clawes with his bylle/ And he that holdeth fastest he loueth hym beste/ and kepeth hym next by hym/ And them that holde but febly/ he letteth them goo and taketh no hede of them/ ¶Whan the Egle is very olde and aged he flyeth so hye that he passeth the clowdes/ and holdeth there his syght so longe agaynst the sonne that he hath all lost it and brente all his fethers/ ¶Than he falleth down on a mountayne in the water that he hath tofore chosen/ and in this maner he reneweth hys bylle/ ¶And whan his bylle is ouer longe he breketh and bruseth it agaynst an harde stone & sharpeth it.
¶Whan the turtle doue hath lost her make whom she hath first knowen/ neuer after wyll she haue make ne sytte vpon grene tree/ But flyeth amonge the trees contynually bewaylynge her loue/ ¶The hostryche by hys nature eateth well yron/ and greueth hym not/ whan the heron seeth the tempest cometh/ he flyeth vp so hye tyl he be aboue the clowdes for to eschewe the rayne and tempeste.

¶ The chowe whan she fyndeth gold or syluer of her nature she hy deth and beryth it away/ ¶ And who somtyme herdeth her boys/it semeth propely that she wolde speke/ The crowe weneth that he is the fayrest byrde of al other/and the beste syngyng/yf her byrdes be white in ony place/she wyll neuer do them good tyll they be all blacke/ The peacock whan he beholdeth his feders he setteth vp his tayle as rounde as a whele all aboute hym/bycause his beautye sholde be alowed and preysed/and is moche proude of his fayre fe thers and plumage.but whan he beholdeth towardhis fete/which be foule to loke on/than he letteth his tayle fall wenynge to couer his fete/ ¶ The gosshawke and sperhawke take theyr prayes by the ryuers/but they that be tame and reclaymed bynge that they take to theyr lorde which hath so taught them/ ¶ The culuer or the dowue is a symple byrde/and of her nature nourysheth well the pygeons of another dowue/ And apperceyueth well in the water by the shadowe and seeth therin whan the hawke wolde take her ¶ The huppe or lapwynge is a byrd crested/which is moche in ma reys and fyldes/and abydeth leuer therin than out therof/who so euer enoynteth hym selfe with the blode of the huppe/and happe that after layde hym downe to slepe/ hym sholde seme anon in his slepe dremynge that all the deuyls of hell sholde come to hym and wolde strangle hym/ The nyghtyngale of her proper nature syngeth well and longe/& otherwyle so long that she dyeth syngyng/& the larke lykewyse dyeth of syngyng/ The swanne syngeth ofte tofore her dethe/ In lykewyse do ofte many men/Of these thynges & of many other.moche people meruayl that neuer herde of suche thyngs tofore nekno we not therof as we do here that dayly fynde it.for in this boke we fynde many thynges and reasons/wherof men mer uayle wrongly that neuer haue sene/lerned ne herde of them.

¶ Of dyuerſites of ſome comon e thynges/ Ca. .xvii.

PLenty and many thynges there ben at eye/ of which the reaſons ben couert and hyd fro vs of which the people meruayl but lytel/ by cauſe they ſe it ſo ofte/ The quycke ſyluer is of ſuche nature and maner that it ſuſteyneth a ſtone vpon it where as water and oyle may not/ for the ſtone in them gothe to the bottom/ The lyme or brent chalke/ in colde water anon it chaufeth & is hote that no man may ſuffre his hande on it/ The rayes of the ſonne make the here of a man abourne or bloũde and it maketh the fleſſhe of a man browne or black/ And it whyteth the lynnen clothe/ And the erthe that is moyſte and ſofte/ maketh dry e and harde/ and ware that is dry/ it relenteth and maketh ſoite. Alſo it maketh colde water in a veſſell warme/ Alſo out of a glas agaynſt the ſonne men make fyre/ and out of Cryſtall in lyke wyſe alſo wyth ỹmytynge of a ſtone agaynſte yron cometh fyre and flam beth/ The brethe of a man which is hote coleth hote thynge/ And it chaufeth colde and ayre by meuynge/ The erthe which is peyſaunt and ryght heuy by nature holdeth it in the myddle of the ayre wyth out pyller and foundement only but by nature/ And therfore he is a fole that meruayleth of thynges that god maketh. For no creature hath the power to ſhew reaſon wherfore they ben or not/ For there is nothyng how lytell it be that the gloſe may be knowen vnto the trouthe ſaue onely that which pleaſeth our lorde god/ For to be wel ſoũded in clergye may men know & vnderſtande the reaſon of ſome thyngs/ & alſo by nature ſuch thynge as by reaſo can not be compre hended/ Thoughe a man enquyre neuer ſo long of that that is wrought in therthe by nature & he ſhal not come to the knowlege wherfore ne how they be made/ This may no man certaynly know/ ſaue god onely which knoweth the reaſon and vnderſtandeth it.

¶ For to know where helle stadeth & what thynge it is.
Capitulo. xviii.



THaue declared to you and deuyſed the erthe after the beſt wiſe that we can/ But now it is expedyent for to knowe and enquyre what places and what manſiõs there may be within the erthe/and whether it be paradys/hell/purgatorye/lymbo/or other thynge/and whiche of them is beſt/and which of them all is worſt/As to the regarde of me and as me ſemeth that that/whiche is enfourmed & cloſed in the erthe is hell/For hell may in no wyſe be in the ayre that is ſo noble a place/ Alſo I maye frely mayntayne that it is not in heuen /For that place is ſo ryght excellent pure and net/that helle may not endure there/For becauſe that hel is ſo horrible/ſtynkyng/ foul/and obſcure /Alſo it is more poyſant and heuy than ony thyng may be/wherfore it may be clerly vnderſtande that helle is beynge in the moſte loweſt place/moſte derke/and moſte vyle of the erthe.

¶And as I haue here ſayd to you the cauſes why/ In trouthe it may not be in the ayre/and yet leſſe in heuen for it is in all poyntes contrarye to heuen aboue.for as moche as thys two ben cõtrarye one to another of whyche place in that one is founde but all glorye and conſolacyon/that is heuen/ ¶In that other is nothynge but of all tribulacyon/that is hell/And therfore it is withdrawen al vnder fro that other as ferre as may be poſſyble/and that is ryghte in the myddle of the erthe I ſaye not that hell is not i none other place where it be/For after the dethe he hathe payne and ſorow that hath deſerued it/ And whan ſuche one ſhall haue his payne aboue /ſo moche hath he the worſe/ ¶Al thus as it ſhold be of ſome man that had a great maladye ſo moche that he ſhold deye/And that he were brought in to a fayre place and pleſaunt for to haue ioye and ſolas/ of ſo moche ſholde he be more heuy and ſorowfull whan he ſawe that he cowlde ne myght helpe hym ſelfe ne take therby no ioye ne releſe/In lyke wyſe ſhall it be of theſe vnhappy caytyfs that ben by theyre demerytes dampned in hell/wherof we ſhal now here after to yow more ample & largely declare/for to kynſſhe the bettre our boke/ ¶Now yf ye wyll take hede and vnderſtand/we ſhal deuyſe how helle is in the myddly of the erthe /and of what nature it is And of the ineſtymable tourments which they haue that be therin put and condempned ye haue well vnderſtanded how by nature the foure Elementes holde them that one within that other ſo that the erthe is in the myddle and hoideth hym in the myddle of the fyrmament al in lyke wyſe is there in the myddle of the erthe a place why che is called Abiſme or ſwolowe/and erthe of perdycyon.

Thus moche saye I to you of this place that it is ful of fyre and of brennynge sulfre/And it is ouer hydeous/stynkynge full of ordure and of al euyll aduenture/It is moche large within/and bynethe it is strayt/Al that falleth therin anon the sulfre contynually brēneth/ destroyeth/and consumeth/And that thyng that cometh therin shall neuer fynysshe ne haue ende/but alway shall brenne without ende Alway it brenneth/and alway renewyth/And all that come therin maye neuer dye/for this place is of suche nature that the more it brenneth the longer it endureth/ ¶This place of hell hath with in hym all the euyls of his partye/There dethe holdeth his standard which sendeth out thrugh al the worlde for to fetche them that ben his. ¶Thyder come all euyls and all the euyll appoytes/This place is called the erthe of dethe/for the soules that be brought thyder/they abyde and dwell there withoute ende Certaynly they dye lyuynge/and alway lyue dyenge/The deth is there their lyfe & their byande and meat. The dethe holdeth them there at his commaūdement/this is the ryght pytte of fyre that brennyth/& al in lyke wise as the stone is drowned in the see whan it is throwen and sonken/ and neuer shal be after sene/ryghte so be the soules sonken into the bottom/which contynually brenne and be drowned there/but for al that they dymynysshe not ne haue ende/But in suche myserye abide their punysshyon nyght & day/& so shal cōtinue perpetually and without ende/for what someuer thynge that is spyrytual may neuer dye in suche wyse that it be all dede/but the dethe wolde they haue and wysshe after it encessauntly/the soule may neuer dye after that it is out of the body but whan it is there/It shall alwaye languysshe/and euer after that it is in hell it shal haue nothynge but euyl/this is the londe of oblyuyon and forgettynge/for al they that ben there shal be forgoten/lyke as they forgate in this worlde theyr maker which is ful of myserycorde and pytye/

¶And therfore he hathe layde them there in forgettynge where they shal neuer haue mercy ne pardon in this lande so tenebrouse/hydeous/and full of al stenche/and of sorowes/anguysshes/heynes/hugre/and thurste/shal neuer creature haue gladnes ne ioye/these ben the terryble paynes stynkynge/ and there is fyre so ouer moche and ardaunte/hote/and anguysshous that our fyre and the hete is no more vnto the regarde of that fyre of hel than a fyre paynted on a walle is in compary sonto the regarde of our fyre/

¶There be the holes perylous whiche ben of fyre and of yce so hydeous/horryble/ful of venyme/and of foule bestes that make so gre

at noyse & so greate payne & ennoy vnto the dolorous soules that ben in the sayde abysme/that no creature that can or may recoun or tel the hondred parte. ¶In this contrey there be plenty of other places whiche ben perillous and horryble/and of them ben some in the see as well as within the erthe/ ¶In many yles that be by the see is terryble stenche of sulphre ardaunt in great fyre whiche is moche paynfull/There ben many great montayn es of sulphre that bren nyght and daye where as many soules ben encombred and brenne contynually for to purge theyr synnes and inyquytes/ This may than well suffyse as touchynge to speke any more of this mater/ For there is no creature that can tell the great tourments and inestymable paynes that a man of yll lyfe receyueth for his demerytwhan he is departed fro this worlde/For he gothe euyll to worke/ ¶Here we cease for this tyme/and now saye no more herof/syns we haue spoken longe of one of the foure elementys which is therthe/we shal now speke of the second/and that is of the water that alway rōneth And after we shall speke of thayre and after of the fyre euerych e in his ryght ordre.

¶How the water renneth by & thrughe the erthe Ca. xix.

¶ The water/that is the depe ſeethe which enuyronneth & goth
rounde aboute the worlde/and of this ſee/meueth all the flo
des and ryuers that renne thrugh the erthe/And renne ſo ferre their
cours/and that they retourne and come agayne thyder fro whens
they departed/and that is the ſee/And thus goth the ſee contynually
tournynge and makynge his cours that for ſo moche as the water
is more lyght than the erthe/ſo moche is it aboue and is moſte nere
to therthe/He departeth and deuydeth the cõtreys/& ſpredeth hym
thrughe out al the erthe/he falleth agayn in to the ſee/And ſpredeth
agayne by the flodes & ryuers and goth ſourdynge and ſpryngyng
in the erthe fro one place to another by vaynes/in lyke wyſe as the
blode of a man gothe and renneth by the vaines of the body & gothe
out & iſſueth in ſome place/in lyke wyſe rõneth the water by the vay
nes of therthe & ſpryngeth out by the foũtaynes & welles/fro which
it goth al aboute/that whã one delueth depe in a medow or mõtayn
or in valey/men fynde water/ſalte or ſwete or ſome other maner/

¶ How the water ſwete/or ſalte/hote/or enuenymed sourdeth out of the erthe. Capitulo. rr.

All waters come of the see as wel the swete as the salte/what so euer they be/all come out of the see/and thyder they retorne all agayn/where vpon some may demaunde/sythe the see is salte/how it is that some water is fresshe & swete/Herto answereth one of the auctours and sayth that the water that hathe his cours by the swete erthe is fressh and swete/& becometh swete by the swetnes of therthe/which taketh away from it his saltnes & his bytternes by her nature/For the water which is salte & bytter whā it renneth thurgh the swete erthe/The swetenes of the erthe reteyneth his bitternes & saltenes/and thus becometh the water swete and fresshe whych tofore was salt and bytter/Other waters sourde and spryngebytter and blacke/which some men drynke for to be heled of their maladyes in stede of poyson/the which often tymes make great purgacyons to some people/This is a water that spryngeth blacke and clere and renneth in the erthe which is byttre and blacke/& it is full of moche sythe/wherfore men haue great meruayl how it may be holsom to the body of a man/In another place sourdeth water which is hote/& there myght be scalded therin a pygge or a goose whiche ben called bathes or baynes or baynes naturell/ Of suche maner bathes ben there in almayne in the cyte of Aeon/and in Englonde at bathe/In lorayne another at the abbay of plounners/& at ays in gascoin another. ¶ This procedeth for as moche as with in the erthe ben many caues whuh ben hote and brennynge as fire/ And the erthe hathe plenty of baynes whiche ben all full of sulphre and there cometh other whyle a wynde great and strong the which cometh by the water that sourdeth/And that it put forthe so stronly that the sulphre catche fyre and brenneth lyke as a fornayce all brennig shold do/And the water that hath his cours by these baynes become also hote as fyre/and yf it happed that the water shold spryngе out of the erthe ryghte there/It shold ysshe sourdynge all enflammed and all boylynge as it were on a fyre/But fro as ferre as his cours renneth fro thens so moche wareth it lesse brennynge/& it may renne so longe and so ferre that in the ende it becometh colde agayne/for there is nothynge so hote but that it coleth/saue onely the fyre of helle which contynually brenneth/and shal brenne without ende/

¶ Of dyuers fontaynes & welles that sourde on the erthe.
Capitulo. xxi.

ſalte & good/And this water furnyſſheth all the contrey of ſalte/
And this water ſpryngeth out of a pute whych is the pytte of Da
uyd/In this contrey ben other fontaynes that be ſo hote that it brē
neth all that it toucheth/In the ſame place ſpryngeth fountaynes
that ben as colde as yce/There ben baynes well attempred and me
dyd with colde water and hote/And they that bayne them in theſe
baynes/theyre ſcabbes & ſores become al hole/yet there ben of other
fontayns ryght black wherof ben holden right holſom/& people drynk
of them in ſtede of medecynes/And they make of tyme great purgaci
ons/and greater than of a medycyne or a laratyfe/Another foun
tayne there is towarde the Orient wherof is made fyre grekyſſhe
with other myrtyōs that is put therto/the which fyre whan it is ta
ken and lyght is ſo hote that it can not be quenchid with water/but
with ayſel/bryne/or ſande onely/¶The ſaraſynes ſell this water
dere/& derer than they do good wyne/Other fountayns ſourde in
many other places that hele ſore eyen & many ſores and woundes/
Other fountaynes there be that rendre to a man his mynde and me
more/Other make men to forgette/Other refrayne people fro leche
ry/Other that meue them therto/Other there be that make women
to conceyue and bere chyldren/and other that make them bareyn &
may bere none/There be ſome ryuers that make ſhepe blacke/and
other that make thē whyte/On the other ſyde ben many pondes in
which may nothyng ſwym/man/ne hounde/ne other beſte/but ſyn
keth to the bottom/There be other in which nothyng may ſynke/but
contynually flote aboue/There be other fontayns hote that blynde
the theues whan they forſwere thē of the treſpas that they haue cō
myſed/And if they be wrongfully borne on honde and than drynke
of this water/certaynly they ſhal haue better ſyght thā tofore/Of al
theſe thynges can no man rendre the reaſon/but that we ought to
vnderſtande that all this procedeth by myracle/yet be there other fon
tayns that be ſtyll & clere/& whan men play ouer thē with harpe or
other inſtrumēt/The water ſpryngeth vp with great bobles by the
ſounde/there be other fontayns which be ryght perylous/But for
this tyme we wyll ſpeke no more of this/but we wyll ſhewe you nere
wherfore and how the erthe quaueth/

¶Wherfore and how the erthē quaueth and trembleth/
Capitulo cxii.

Here ben plenty of fountayns in other places that moche ofte chaunge their coloure & other of whiche come myracles/ but it is not well knowen wherof it procedeth. In the lande of Samarye is a well that changeth his coloure foure tymes in a yere/ It is fyrste grene/ & after it chaungeth in to sangwine & after it becometh trouble/ and after all this it becometh clere and nette/ and ryghte fyne/ in suche wyse that men delyte them in beholdynge of it/ but no persone dare drynke of it/ In this partye is yet another fontayne which spryngeth thre or foure dayes the weke good & holsom And the other .iii. days it spryngeth not/ but is all drye/ There is also a greate ryuer that renneth fyre dayes duryng in the weke/ And on the Sabotte daye it renneth not/ for as sone as the Sabotte day approcheth/ he goth in to the erthe agayn/ By acres the cyte is founde a maner of sande/ And there is founde also of the glayre of the see which ben medled to gydre/ & of these two myxtyons is made good glalle and clere/ In Egipte is the rede see where the chylderen of Israhel passed ouer dryefote for to come in to the lande of byheste/ This see taketh his name of the erthe/ for therthe is al rede in the bottom and on the sydes in suche wyse that the water seemth al rede/ In perse is a ryuer longe & brode which in the nyght is so hard froten that people may go ouer it/ and on day tyme it is clere and rennynge/ there is in Esypte a well of whiche the nature is meruaylous the whiche quencheth brondes of fyre/ and after setteth them a fyre agayne/ In ethyope is another that by nyght hath so great hete that no creature may drynke therof/ and all the daye it is so colde that it is froten al hard/ In lorayne nygh vnto metz the cyte is a water that renneth there the which is soden in great palles of copper and it becometh fayre

NOw wyll ye vnderſtande what it is the meuig of the erthe/& howe the erthe quaueth & ſhaketh that ſomme people call an erthe quaue/bycaule they fele the erthe meue & quaue vnder their fete/& often tymes it quaueth ſo terryblȳ & meueth that ſome tyme cytyes ben ſō ken in to the erthe that neuer after ben ſene/& this cometh of the greate waters that come within the erthe/ſo that by the puttynge out of the great flodes and waters growe ſomtime cauernes vnder the erthe/and the ayre that is ſhette faſt withi/the which is enclоſed in great dyſtreſſe/yf therthe be there feble ſo that it may not reteyne it all within/than is it conſtrayned to open and cleue/ for ayre enforceth to be oute/wherof it happeth ofte that townes/ cytyes/and caſtels/ben ſonken downe in to the abyſme/and yf the erthe be of ſuche force and myght that it cleueth not by the ſhoupynge of the wyndes that be within/Than the erthe meueth and quaueth ſomeuaylouſly that the great walles and hye towres that be ther on fall down ſo ſodeynly in therthe that it deſtroyeth and ſleeth the people that ben therin which ben not aduyſed ne purueyed of ſuche daungers/whiche is a great ſorowe for the poze people that dwell there/whan they be not aduertyſed at what tyme ſuche a tempeſte ſholde come/But wyſe men that doubte for to dye prepare them ſelf and make them redy agaynſt the dethe for to come to the imperyall mageſty where they ſhall haue ioye euer laſtynge,

How the water of the see becometh salte/ Ca. xxiii.

NOw I wyll recounte and tel to you how the water of the see becometh salte/which is so bitter that no person may dryncke therof/ne the beestes in lyke wyse/ It cometh by the sonne/for it maketh so great hete in some place/that the see is chaufed so strongly that the erthe whiche is vnder draweth to hym a byttre moysture/ which taketh away all sauour/for in the see ben ryght great & hye montayns & depe valeys whiche be full of bytternes/greuous/and enfected/And the erthe which is in the bottom of these valeys scumeth for the hete of the sonne vpwarde/which medleth with the water in the depe in suche wyse that it drawe th the saltenes vp by the hete of the sōne so long tyl it be medly d with that other/& thus is the water of the see salte with the other/Thā let vs fynysshe to speke any more of the waters fresshe or salte/& shal recount to yow of the aire which is one of the foure Elementes & of his propretyes/

¶ Here folowyth of the ayre and of his nature/
Capitulo. xxiiii.

THe ayre is sette aboue the water/& is moche more subtil than the water or the erthe/and it enuyronneth therthe on al partyes/& dompneth as hye as the clowdes mount ¶ This ayre which enuyrōneth vs on al sides is moche thycke/ But we lyue therby in lykewyse as the fysshe lyueth by the water/whiche he drawyth in and after casteth it oute agayne/ In such maner the ayre profyteth to vs/for we drawe it in and after we put it out agayne/ And thus it holdeth the lyfe within the body e/for a man sholde soner dye without ayre than a fysshe sholde do without water to whom the lyfe is sone fynysshed whan it is out of the water/ ¶ The ayre mayntayneth in vs the lyfe by the moysture that is in hym/and by the thycknes that is in hym he susteyneth the byrdes flyenge that so playe with theyr wynges and meue them so moche al about theryn that they dysporte thē ledynge theyr voye therin and theyr deduyte/

¶ Thus gone the byrdes by thayre fleyng/ſyngynge/and praiſyng theyr maker and creatour/lyke as the fiſſhes that gone ſwymmyng in the water/and ye may apperceyue in this maner/take a rodde and meue it in the ayre/and yf ye meue it faſte it ſhall bowe anon/ and if it founde not the ayre thycke it ſholde not bowe ne ploye/but ſholde hoide hym ſtreyght and ryghte how faſte ſo euer ye meued it/

¶ Of thys ayre the euyll ſpyrytes take theyr habyte/and theyr bodyes which ſomtyme put them in the ſemblaunce of ſome thynges as whan they may appere i ſome place for to deceyue ſome perſon man or woman or for to make them go out of theyr mynde/wherof they haue ſomtyme the myght/or whan by the arte of nygromancy he putteth him in ſome ſemblaunce or in ſuche a fygure as he wyll/ But thys is a ſcyence that who that gyueth hym therto to do euyll. it gyueth hym the dethe/for yf he take not hede therto he ſhal be dãpned body & ſoule/but we ſhal enquyre here after what cometh fro the ayre in to the erthe/

¶ How the clowdes and raynes come comynly. Ca. xxv.

Now we ſhall ſpeke of the clowdes for to know what it is and of the raynes alſo/ The ſonne is the foundement of al hete and of al tyme/ all in ſuch wyſe as the herte of a man is the foundement by his valour that is in hym of all naturall hete/ For by hym he hathe lyfe/ & all lyueth by hym that groweth on the erthe as it pleaſeth to our lorde/ as here after ſhalbe declared yf ye wyll here and well reteyne the mater & ſubſtaũce of this preſent boke/ for the ſonne maketh the clowdes to mounte on hye/ and after it maketh the rayne to auale downe and I ſhal ſhewe to yow how it is done & ſhortely/ and ye ſhall vnderſtande in what maner/ whã the ſonne ſpredeth his rays vpon the erthe & vpon the mareys/ he dryeth them ſtrongely & drawe th vp the moyſture which he enhaunſeth on hye/ But this is a moyſture ſubtyll which appereth but lytell and is named vapour/ and it moũteth vnto the myddle of the ayre/ and there is aſſembled and abydeth there/ and lytyll and lytell it encreaſeth that it cometh thycke and derke in ſuche wyſe that it taketh fro vs the clerenes of the ſonne/ And this thynge is the clowdes/ But it hathe not ſo moche obſcurete that it taketh fro vs the clernes of the day/ & whã it groweth ouer thycke it becometh water which falleth on therthe and the clowdes abydeth whyte/ than ſhyneth the ſonne/ which is on hye thrughe the clowdes/ yf it be not ouer blacke/ lyke as thrugh a glaſſe/ or lyke a candell with in a lanterne/ which gyueth vs light and yet we ſe not the candell/ Thus ſhyneth the ſonne thrughe the clowdes which is vnder hym and rendreth to vs the clerenes of the day/ as longe as he maketh his tourne about the erthe/ & the clowdes that alwayſo longe abydeth and taketh no more moiſture ſo lõg after that it becometh blacke and moyſte/ Than yſſueth out the water which cometh to the erthe/ and thus groweth the rayne/ & whã it is all fallen to the erthe/ and the great moyſture is ſtaunched/ the clowde hath loſte his browne colour that he helde before & the derkenes of which ſhe emperyſſhed the day/ Thã appereth the clowde clere and whyte which than is lyght and moũteth on hye ſo mothe that in the ende ſhe falleth and is deteted by the hete of the ſonne on hye which all dryeth vp/ Than the ayre wexeth agayne pure and clere/ and the heuen as blewe as aſure/ Of therth groweth the rayn and the clowdes alſo/ as of clothe that is wete/ and ſholde be dryed by the fyre/ than yſſueth theron a moyſture lyke a ſmoke or fume and goth vpwarde & who that than helde his hande ouer the fume

he sholde fele a vapour wh ch sholde make his hande moyst & wete that water sholde droppe & fal therof/ In this maner grow the clowdes & rayns/ and our lord god multyplyeth them well whan it pleaseth hym to make the sedes and fruites grow that be on erthe/

¶ Of frostes and snowes/ Ca. xxbi.

Ye great snowes and the great frostes come by the great colde of the ayre whiche is colde in the myddle more than it is in any other parte/ lyke as ye maye see of the mountayns which ben in hye places/ lyke as the mountayns of sauoye/ of pyemont/ or in wayles/ and in these other mountayns/ where there is of custome more snowe than is in places that ben in playne grounde/ All this cometh of the coldnes of the ayre/ which hath lesse hete aboue than bynethe bycause it is more subtyll than that whiche is bynethe/ and whan the more subtyll is on hye so moche reteyneth he lesse of hete/ but the more that the ayre

is thycke so moche more it chaufeth/and the soner where the sonne may come/Thus saye I to you of the ayre that is aboue on hye/ which is more colde than this is bynethe/for as moche as it is not so thycke as that is whiche is nyghe the erthe/ and for the wynde that ofte groweth/which maketh it ofte to be in meuyng/for the wa ter that rennethfaste eschaufeth lessethan that dothe the which hol deth hym stylle/so dothethe ayre whiche is on hye/and therby gro weth the colde that freseth this moysture anon as it is gone vp on hye/andfalleth downe agaynefrosen/

Of hayles and of tempestes/ Ca.xxbii.

I this maner comen in the somer the great hayles & the greate tempestes/for in the ayre they growe/wher of often tymes cometh great colde/so that the moystu re that is in the aire brought vp/is drawen to be frosen and it is in the ayre assembled and amassed/for the hete that chaceth after it/and the sonne causeth it to lose and to falle on the erthe/ But it falleth not so greate to the grounde as it is frosen aboue on hye/for it cometh downe brekynge & amenuy synge in the fallynge/and this is the tempeste which falleth ofte in the somer/the which is greuous and ennoyous to many thynges/

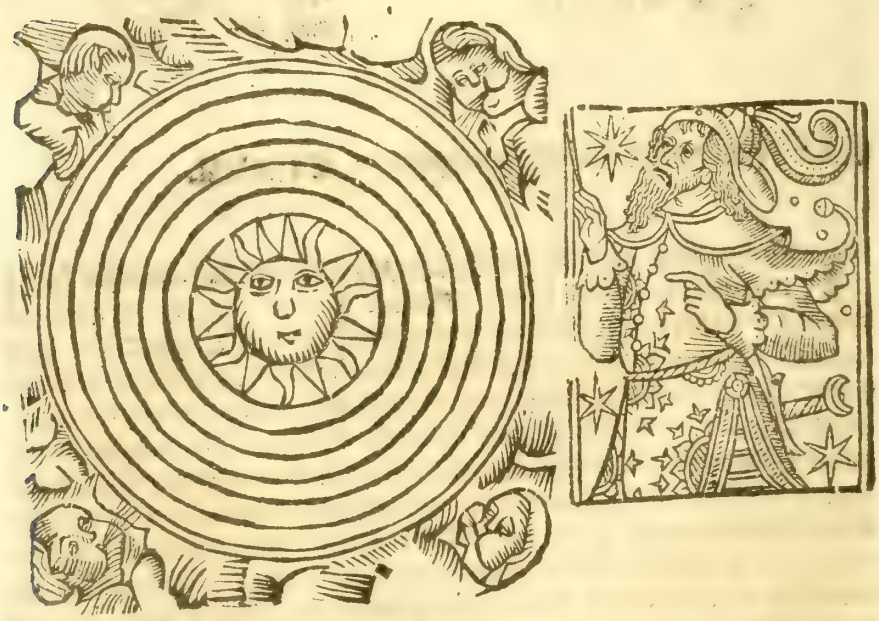
¶ Of lyghtnynges and of thondres/ Ca.xxbiii.

IN the ayre happen many thynges of which the people spekē not gladly of/ for they retche not moche of suche thynges of whiche they can not well come to the knowlege/ ¶ Of the erthe quakes/ Of thonderynges/ & that which maketh the clowdes to thūder & that that maketh the erthe to open/ and this that maketh the clowdes to lyghten whan the thonder is herde/ for thonders & lightnynges be brekynge out of wyndes that mete aboue the clowdes so aspirely that in theyr comyng groweth a greate fyre in the ayre/ & this thonder falleth in many places & with the wyndes openeth the clowdes/ & so the thonder and lyghtenyng falleth/ and it is of so heuy nature that ofte it perseth therth to the myddle/ & ofte it quencheth er it cometh vnto the ground/ after that it is of poyse/ and that it is not of ouer stronge nature/ for whan the clowde is moche darke and thycke and that there is great plentye of water/ the fyre passeth not

so one but it is quenchyd in the clowdes by the greate quantyte of water therin or euer it may perse thrughe so that it may not approche the erthe/but in the straynynge & brekynge that it maketh than in the clowde/groweth a sowne so great and stronge/that it is meruaylous to here/I declare to you for certaynethat this is the thonder which is moche to be dradde/In lyke wyse as of an hote and brennynge yron that is put in a tubbe of water therof groweth a noyse and a great sowne and also whan coles be quenchyd/but the lyghtenyng of the thonder appereth and is sene ere ye here the boys/for as moche as the syght of a manis more subtyl than the herynge/

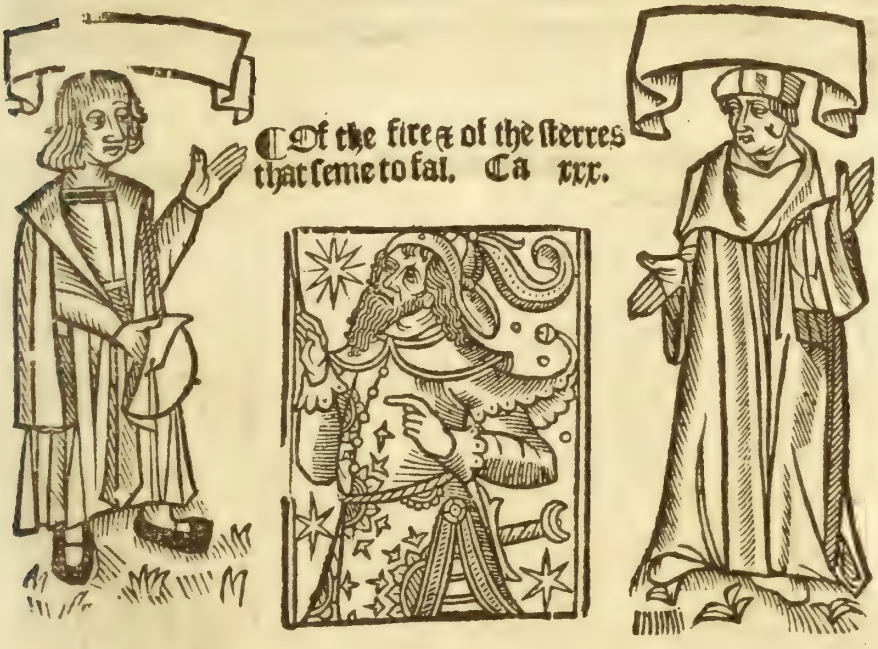
¶ All in lyke wyse may I saye to you of the thonder/the which men se tofore er they here it/and so moche the ferther is the sowne of the lyghtenynge after it is sene/er the sowne be herde/and the soner after the lyghtenyng is sene and the noyse herde/so moche is the thonder more nyghe vnto vs/

¶ For to knowe how the wyndes grow & come. Ca xxix.



IF the wyndes maye men enquyre reason of them that vse the see/ ¶ And the wyndes do renne rounde aboute
D the erthe ofte tymes/& entrecount & mete in some place so aspirely that they ryse on height in such wyse that they

¶ And the ayre that is so lyft & taken fro his place/remeueth other ayre in suche facyon that it retorneth as it were afterwarde/& goth crycnge and brayeng as water rennynge/For wynde is nothynge but ayre that is meuyd so longe tyll hys force be beten downe with the stroke/ ¶ Thus come ofte clowdes/raines/thundres/ and lyghtnynges/and the thynges afore sayd/There ben yet other reasons howe these wonkes come/but those that best serue to knowlege and lyghtely to be vnderstande we haue drawen out shortely/ and now we shall cease of this mater/but now we wyll speke of the fyre which is aboue the ayre onlye/



¶ Of the fire & of the sterres that seme to fal. Ca xxx.

We ought to vnderstand that aboue the ayre is the fyre/this is an ayre which is moche shynyng/& of greate noblesse/& is moche clerer than the fyre that we vse/This ayre in whiche is no maner of moystoure/it stretcheth vnto the mone/ ¶ And there is sene ofte vnder thys forsayd ayre somme sparkles of fyre/and sene right that they were sterres/of whiche as men saye they ben sterres/the whyche gothe rennynge/and that they remeue fro theyr places/but they be none/but it is a maner of fyre that groweth in the ayre of

some dry̆e vapour/whiche hathe no moysture within it which is of the erthe and therof groweth by the sonne which drawe th it vp on hy̆e/and whan it is ouer hy̆e it falleth & is sette a fyre lyke as a candell all brennynge as vs semeth/and after falleth in the ayre moyste and there is quenchyd by the moystnes of the ayre/and whan it is greate and the ayre dry̆e it becometh all brennynge vnto the erthe/ wherof it happeth ofte that they that sayle by the see or they that go by londe haue many tymes founde & sene them all shynynge & brennynge fall vnto the erthe/& whan they come where it is fallen they fynde non other thynge but a lytel allhes or lyke thyng or lyke som lefe of a tree roten that were wete/ ¶ Than parceyue they well and byleue that it is no sterre/ ¶ For the sterres may not fall/but they muste meue all in theyre cercle ordynately and contynually nyghte and day egally/

¶ Of the pure ayre and how the seuen planettes ben sette. Capitulo. xxxi.

The pure ayre is the fyre the which purpꝛ ſeth & taketh his place vn to the heuen/ In this ayre is no obſcurety ne derknes foꝛ it was made of clere puryte/it reſplen dyſſheth & ſhyneth ſo cler ly that it may to nothyng be compared/in this aire ben ſeuen ſterres whyche make theyre courſe all aboute the erthe/whych be moche clene and clere & be named the ſeuen pla nettes/of whom the one is ſette aboue the other and in ſuche wyſe ordeyned that there is moꝛe ſpace fro the one to the other/ ¶Than there is fro the erthe to the mone which is lyſtene tymes than all the erthe is great and euerych renneth by myracle on the fyrmament & maketh hys cercle the one great and the other lytell/after that it is & ſytteth moꝛe lowe/foꝛ of ſo moche that it maketh his cours moꝛe ne rer the erthe/ſo moche is it moꝛe ſhoꝛte/and ſoner hathe perfourmed his cours/than that whyche is moſte ferre/that is to ſayethat who that made a poynte in a walle and with a compas made dyuers cer cles aboute alwaye the one moche larger than another, that whyche ſholde be nerte the poynte ſholde be leſſe/and leſſe ſholde be his cours foꝛ he ſholde ſoner haue done his cours than the other/ſo that they went togyder egally/as ye may ſe by this preſente fygure tofoꝛe/

¶Thus we may vnderſtande of the.vii planettes of which I haue ſpoken/that the one is vnder the other/in ſuche wyſe that ſhe that is loweſt of all the other is leſte of all/and that is the mone/but by cauſe that it is nert to the erthe/it ſemeth greateſt and moſte aparaũt of all the other/and foꝛ the appꝛochement of the erthe and bycauſe it gothe ſo nyghe/it hath not pure clerenes that cometh of hym ſelfe pꝛopꝛely bycauſe the erthe is ſo obſcure/but the clernes and lyghte that it rendꝛeth to vs/ſhe taketh alway of the ſone/lyke as ſholde a myrrour whan the rayes of the ſonne ſmyteth therin and of the re flexyon the myrrour ſmyteth on the wall and ſhyneth theron as lõg

as the rays of the ſonne endure in the glaſſe/ In lyke wyſe he weth & lyghteth to vs the lyghte of the mone/ & in the mone is a body po lyſſhed & fayre lyke a pomell ryght well burnyſſhd/ which enlaum beth and rendreth lyght and clerenes whan the rayes of the ſonne ſmyteth therin/ the lytell clowdes or darkenes that is ſene therin/ ſome ſay that it is the erthe that appereth within/ & that which is water appereth whyte as agaynſte a myrrour which receyueth dy uerſe colours/ whā ſhe is tozned therto/ other thynke otherwyſe & ſay that it happed whan Adam was dyceyued by the apple that he dyd eat/ which greued al humany lygnage/ and that than the mone was enpeſſhed & his clernes mynyſſhed/ Of theſe .vii. ſterres or pla nettes that ben there and make theyre cours on the fyrmament/ There were firſte no more knowen but twayne/ that is to wete the ſonne and the mone/ the other were not knowen but by aſtronompe Neuertheles yet ſhal I name them forasmoche as we haue ſpoken of them to you/ of theſe there be tweyn aboue the mone/ & bynethe the ſonne and the one aboue the other of whom eche hath on the erthe propre vertues/ and they be named mercurye & venus/ Than aboue the mone & theſe tweyne/ is the ſonne which is ſo clere fayre and pure that it rendreth lyght and clernes vnto all the worlde and the ſonne is ſette ſo hye aboue/ that his cercle is greater than the cercle of the mone which maketh his cours in .xxx. dayes .xii. ſythes. ſo moche/ for the ſonne which gothe more ferther fro the erthe than the mone ma keth his cours/ hath. C C C .lxv. days/ this is .xii. tymes as moche & more ouer as the calender enſygneth/ & yet more the fourth part of a daye/ that be .vi. houres/ but for this that theyre hathe dyuerſely his begynnynge/ the one begynneth on the daye/ & the other on the nyght/ which is great ennoy to moche people/ This parte of a day is ſet bycauſe alway in .iiii. yere is a day conſumed which is aboue in that ſpace which yere is named byſexte or lepe yere/ which in iiii yere falleth ones/ & ſo is ſette fro foure yere to foure yere/ alway one day more/ & than is the ſonne/ comen agayne in his firſt poynt/ & that is in the mydde marche/ whan the newe tyme recomenceth/ & all thynges drawe to loue by the vertue of the retorne of the ſonne/ for in this ſeaſon had the worlde fyrſte hys begynnynge/ and there fore than all thyuge renewith and cometh in verdure by ryght natu re of the tyme and none otherwyſe/ Aboue the ſonne there be thre ſter res clere and ſhynynge/ and one aboue another/ That is to wete Mars/ Iuppyter/ and Saturnus/ Saturne is the hyeſt of the ſeuen planettes/ whiche hathe in his cours .xxx. yere or euer he hathe all

gone his cercle/and these thre sterres reteyne theyr vertues in thyn
ges here bynethe and ye mayse yf ye beholde this fygure how they
be inozde eche aboue other which fygure shewethit wel/

¶ Howe the vii. planettes gyue the names to the. vii. dayes/
Capitulo. xxxii.

These. vii. planettes ben suche that they haue power on
thynges that growe on the erthe/& habounde theyr ver
tues more than all the other that be on the fyrmament &
more apertly worke lyke as the auncyent sage philoso
phers haue enserchyd by theyr wyttes/ of these. vii. pla
nettes take the days of the weke theyr names as ye shal here/ The
mone hath the monday/and mars the tewsday/mercury the wednes
day/Jupyter the thursday/venus the fryday/saturne the saterday/
and the holy sondaye hathe his name of the sonne/and on thys daye
sholde men do thynges that sholde please our lorde/

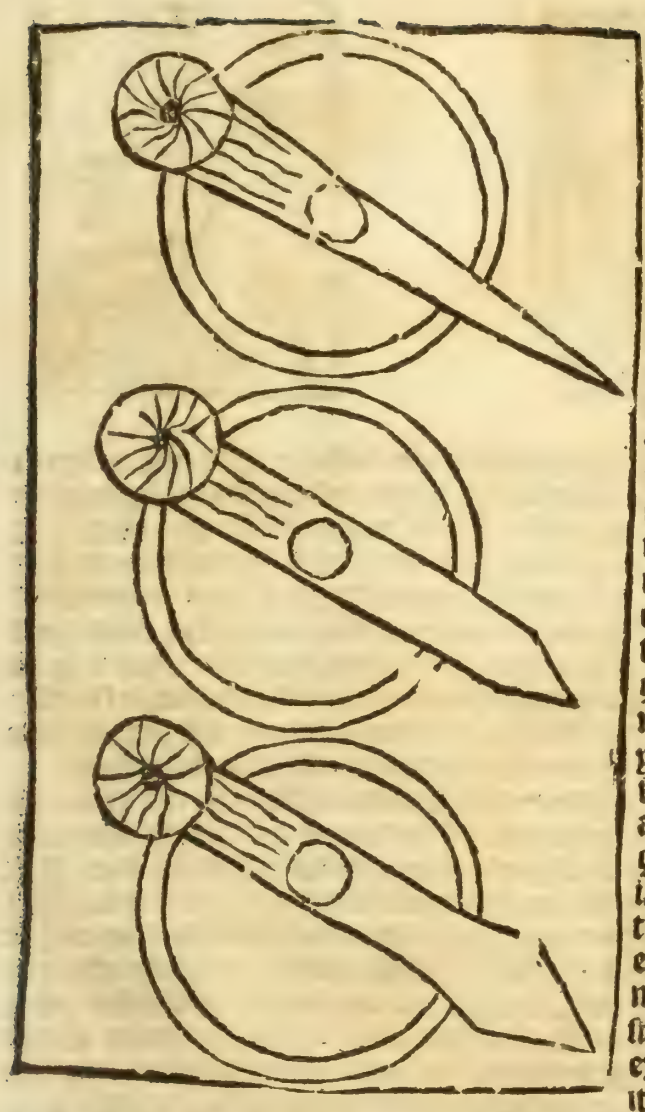
¶ Of the meuynge and goynge about of the fyrmament &
of the sterres that ben therin/ Ca. xxxiii.

Aboue saturne whiche is the last planette & hyest fro vs of all the .vii. planettes is the heuen that men se so full of sterres as it were sowen whan it is clere weder. This heuen that is so sterryd is the firmament which meueth and goth rounde/of which meuynge is so great melody & so swete/that there is no man that if he myght here it that neuer after sholde haue talent ne wyll to do thyng that were contrary vn to god/ But some saye that lyteil chyldren here this melodye whan they laughe in theyr slepe/but herof knoweth no man the trouthe saue god/ for there is nothynge within the erthe nem the see /how dyuerse it be but it is on the heuen fygured and compalled by the sterres/of which non knoweth the name of euerych of them as he that all knoweth and all created by good reason at the regarde of the sterres that may be sene they may be well nōbred & enquyred by astronomy/but it is a great mayster ye/for there is no sterre solytell /but it hathe in hym hole his vertue/ In herbe/in floure/or in fruyte/be it facyon/in coloure or otherwyse/ There is nothynge in erthe that oughte to be ne therin hathe growynge but some sterre hath strength and puyssaunce by nature/is it good or otherwyse suche as god hath gyuen to it/

¶ Thus endeth the seconde partye of this p̄sent volume/

¶ Here begynneth the thyrde parte of this p̄sent volume & Declareth unto how the day & the nyght come/ Ca. i.

¶ Routhe it is that the ſonne maketh his cours aboute therthe in the day and nyght & goth egally euery hour/and alſo long as he abydeth aboue the erthe/ſo longe haue we the pleaſure of the day/ and whan he is vnder the erthe/than haue we the nyght/ lyke as ye wente toznyng a brennyng candell aboute your hede oz as ye ſholde beren a lytell ferther of/rounde aboute an apple/and that the cãdell were alway brennynge/than the partye that were alway agaynſte the candell ſholde alwaye be lyght/ ¶ In lykewyſe dothe the ſonne by his nature foz to be daye and nyghte aboute the erthe/he maketh the day to grow/and on that other parte the erthe is foule & derke bihynd hym and where as he may not ſhyne/and this is the ſhadow of the nyghte which the deduyte of the day taketh away fro vs/but foz as moche as the ſonne is moze greater than the erthe/the ſhadow goth lytyll & lytel tyl at the ende it cometh to nought/lyke the ſowne of a clock endureth after the ſtroke/but yf the ſõne and the erthe were of lyke greatenes/this ſhadowe ſholde haue none ende/but ſholde be egall without declynynge/and yf the erthe were greater than the ſhadowe of the ſonne ſhoulde goo enlargynge and be moze as you ſe the fourme by theſe.iii.ſygures folowynge/



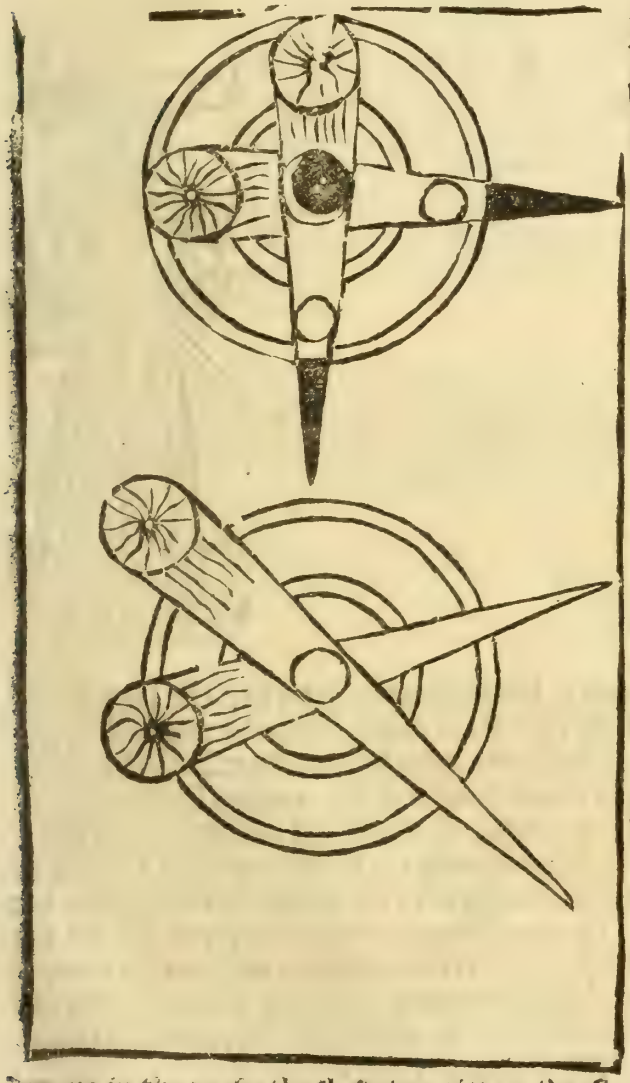
as ye may ſe by the thre fygures folowyng / and alſo ye may proue it other wyſe wythout figures / ¶ Take ſome derke thynge / that may reteyne lyghte within it / as of ſtone / or of tree / or any other thyng / what it be that maye be ſene thrughe / than ſet that to or your eyen agaynſt that that you wolde ſe is it heuen or is it erthe / or any other thyng / yf that thynge that ye holde is more broder than your two eyen be a ſonder / it ſhall take awaye the ſyghte agaynſt that which is no brodec / and if the thynge be all egal in lengthe as moche as you may ſtretche your two eyen / as moch ſhal it be taken fro you as the thynge ſhal haue of greatnes / as ye may ſe by this preſent fygure here before ſene / And yf the thynge haue leſſe of greatnes than the lengthe is bytwene bothe your eyen / it ſhall take fro you leſſe for to ſee / as well nyghe as ferre that it is of largenes of that whiche ye wolde ſe / and whan ye putte the thynge ferther fro your eyen ſo moche the more may ye ſe of that ouer and aboue you / ſo that ye may ſe all / in lyke wyſe is it of the ſone without any doubtaunce /

¶ Why the ſterres ben not ſene by daye as by nyght.

¶ The ſterres of the fyrmament on whiche the ſonne rendreth clernes make contynually nyght and day theyr tornyng and cours within the fyrmamēt rounde aboute aboue as byneth/ but they that ben ouer vs we maye nat ſee by daye/ for the ſonne by hys great clernes and lyght taketh fro vs the ſyght of them/ in lyke wyſe as you ſholde do of candles brennynge afore you/ & that there were a great fyre brennynge betwene yon and the candels/ & had a great flambe/ it ſhoulde take awaye from you your ſyghte that ye ſhoulde nat ſe the candels/ & yf the fyre were taken away and put behynde you/ ye ſholde incontynent ſe the candels tofore you brennynge/

¶ Thus in like wyſe I ſay you of the ſterres that may not be ſene by day as longe as the ſonne maketh his tourne and cours aboue the erthe/ & whan the ſonne is vnder the erthe the ſterres be ſene/ But the ſterres that be ouer vs in ſomer on the day tyme/ in wynter they be ouer vs at nyght/ for thoſe ſterres that we ſe in ſomer by nyght we may not ſe by day/ for the ſonne that goth rounde aboute vs taketh fro the ſterres theyr clernes/ but they be all lyght what parte ſomeuer they torne/ as well by day as by nyght/ as longe as the ſonne goth about hye and lowe ſhynynge/ ſaue that which is hyden fro vs/ for as longe as the ſhadowe may compryſe it/ the ſonne may gyue them no lyght.

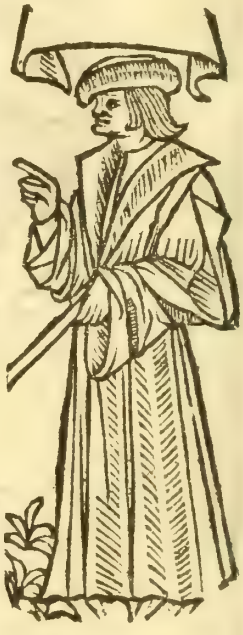
¶ wherfore the ſonne is not ſene by nyght as it is by daye/ Capitulo. iii.



¶ The erthe is ſuch that ſhe defendeth the day which the ſone gyueth vs If the erthe were ſo clere that men might ſee thurghe/ than myght the ſonne be cōtynually as well vnder the erthe as aboue/ But it is ſo obſcure and darke that it taketh away the ſyghte fro vs/ & it maketh the ſhadowe to go alwaye tornynge after the ſonne whyche maketh as many tournynges aboute the erthe as the ſonne dothe which alwayes agaīt it/ for whā the ſonne aryſeth in the mornyng in the eaſt/ the ſhadowe is in the weſt & whan it is ryghte ouer & aboue vs of mydday than is therthe ſhadowed vnder her. & whan the ſone goth downe in the weſte the ſhadowe out in the eſte/ and than whan the

ſonne is vnder we haue than the ſhadowe ouer vs whiche gothe to-warde the weſte/tyll the ſonne aryſeth/& this may ye ſe by thele two fygures tofore on that other ſyde/

¶ How the mone receyueth dyuerſly her lyghte & clerēneſſe/ Capitulo. iiii.



¶ If the that ye haue vnderſtande what it is of the daye and of the nyght/wyll ye ſe the fayt of the mone/& how ſhe receyueth lyght of the ſonne/ſhe receyueth lyght in ſuch maner that ſhe is cōtinually halfe full/& whā ſhe is roūde thā ſhe is full/& whan ſhe is right vn-der the ſonne/thā ſhe appereth not/for thā ſhe is betwene therthe & the cōne & than ſhe chyneth towarde the ſonne & towarde vs ſhe is al derke/but whan ſhe is remeuyd fro the ſonne than begynneth her clernes to appere as ſhe were horned/and whan ſhe is half ful/thā hath ſhe gone a quarter of her cercle/which is the fourthe parte of her cours that ſhe goth euery moneth/& thus is alway her clernes encreasynge & growynge tyl ſhe be all rounde/fayre and clere in ſē-blaunce of a roll/and that we call the full mone/

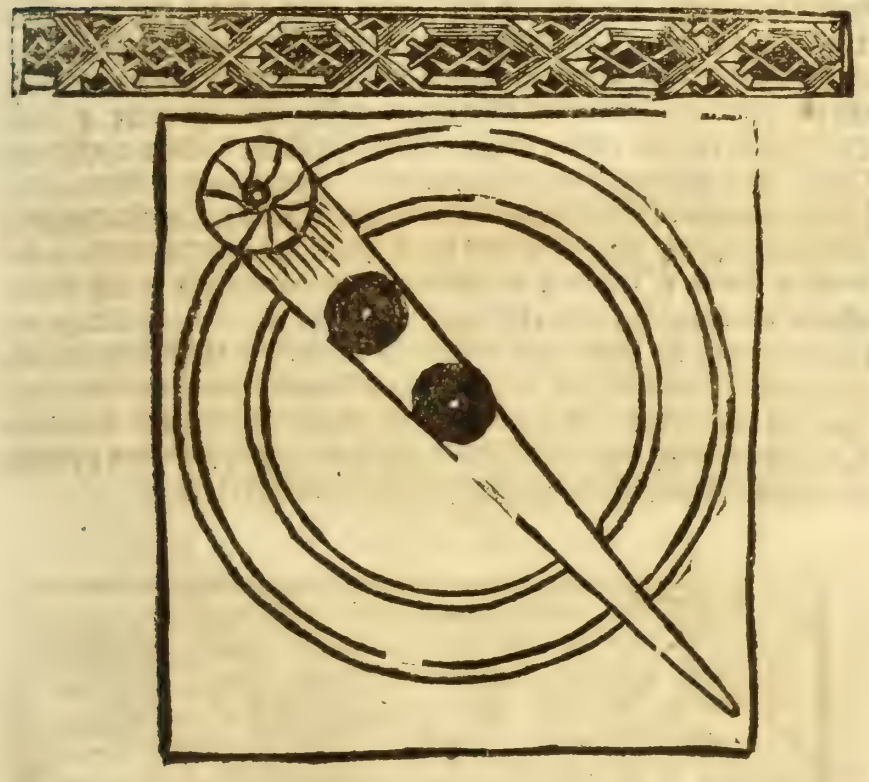
Than is the ryght vnder the sonne as she may ber ryght agaynste the syghte in such wyse that all her lyghte is tozned towarde vs/ Than is the erthe betwene the sonne and the mone so that we may not se them bothe vpon the erthe but ryght lytel/ but one of thē may be sene/ for whan that one gothe downe in the weste that other ariseth in the easte/ and so at euen or morne may bothe be sene but not longe/ for the one gothe vnder therthe and that other cometh aboue Than the mone which hath ben opposite of the sonne and hath gone halfe her cours than she gothe on that other syde approchynge the sonne and beginneth to lesse her lyght and mynysshe it tyl it be but halfe agayne/ and than hath she gone thre quarters of her cercle & is than as nygh the sonne on that syde/ as she was at the fyrst quarter on that other syde/ and so approcheth nere and nere tyll she appere horned as to fore/ & thus she goth tyl the be al fayleth that we may se nomore than of her/ for than is she vnder the sonne, as ye may se by this present lygure/ & I saye nomore herof/ but the she is than betwene the sonne and the/

How the eclypses of the mone happen/ Capitulo/ v.º.

It happeth oftetymes that the mone muste nedes lose her light And that happeth whan she apperyth moste full/and she be cometh as vanysshed awaye/and derketh lytell and lytell tyll she be all fayled/ ye haue herde here tofore how the mone taketh lyght of the sonne/that alway she hathe halfe her lyghte hole/ ¶ but whan it is so that she is in the eclypses than hath she no lyght in no parte/ & this happeth neuer but whan she is torned ryghte so that the sonne gyueth her full lyghte/for the mone go the not alway so ryght as the sonne/for somtyme she passeth in her cours by suche a waye that the erthe shadoweth her all/for the erthe is greater than the mone/and therfore whan the erthe is iuste betwene the sonne and the mone/tha the shadoweth her/for betwene the sonne and the mone is a lygne which declyneth so moche to the mone by whiche the sonne smyteth his rayes in her as longe as there is no lettynge by the erthe/for the more that there is betwene them/the more is the mone shadowed/ ¶ Thus ye may vnderstande/yf a lygne passed thrughe the erthe by the poynt of the myddle of it/ & stratched that one ende vnto the body of the sonne/in suche wyse by ryghte syghte that it endured on that

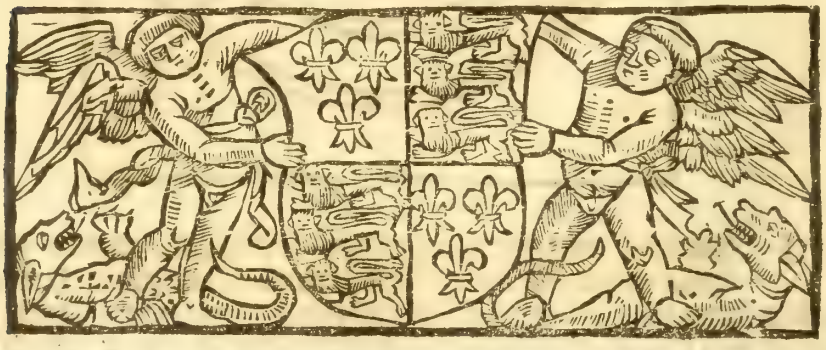
other ende vnto the mone/which euery moneth goth here and there hyer and lower/yf she were so euen agaynst the sonne than shold she fall euery moneth in that shadowe which on all partyes shoulde empesshe her lyght/which than myght not come to her for therthe/for the ferther she is fro the eyght lyne/so moche the more receyueth she lyght/and wha she is so that therthe is exopposito betwene thē than leseth the mone her lyghte/Thus is sene sometyme the mone in the myddle of his moneth loseth his lyght and derke/whan she is moste full/and her lyght tomed vnto derkenes which we call the eclypses of the mone/as ye may welise by this fygure yt ye beholde it wel/

¶How the eclypse of the Sonne cometh/ ca .vi.

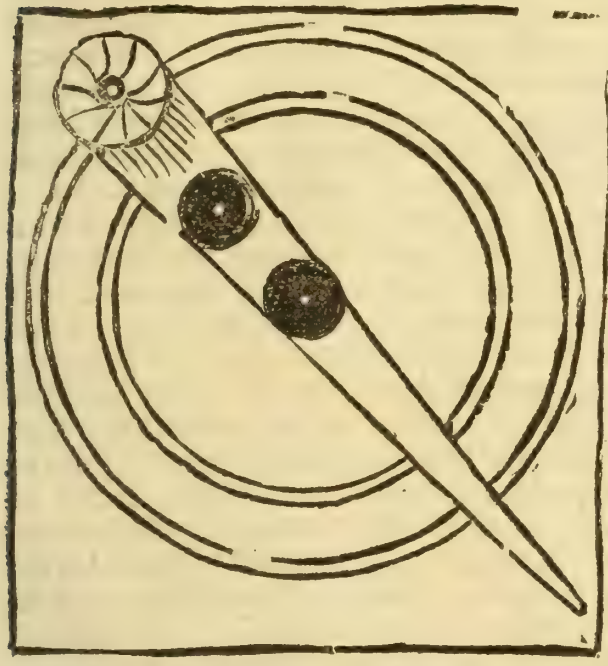


It happeth somtyme that the sonne leseth his clernes and the lyght in the playn day/for it goth as to declyne/and is called in latyn eclipsis/This eclypse procedeth bycause of defaulte of lyght/and it happeth in this maner that whan the mone whych is

vnder the sonne cometh ryghte betwene vs and the sonne/than in the ryghte lygne it behoueth that towarde vs the mone taketh a re teyneth the lyghte of the sonne on hye/so that it semeth to vs that it is defayled/for the mone is not so pure that the sonne may shyne ouer her/and thrughe her as thrughe an other sterre/lyke as a can dle which is sette ferre fro your syght/and after ye helde your hade ryght tofore the candell/than sholde ye not se nothynge therof/In this maner I tell you of the eclypse that betwene the sonne and the mone is not oneweye comon/but the mone gothe an other waye which destourneth her a lytell fro the sonne/wherfore vs behoueth to vnderstande that the mone gothe oftymes whan she is betwene vs and the sonne/somtyme aboue and somtyme bynethe/here and there as she rayseth and declineth/but whan she palleth in the right lygne euen betwene vs and the sonne/than taketh the mone fro vs the lyghte and clernes of the sonne in such wyse as we may not clerly se her in that paas/for than she shadoweth the erthe/& kepeth the raynes of the sonne that they may not shyne on the erthe/¶And they that be in this parte/haue in theyr syght the shadowe behynde them/but it appereth not comunely to all men thrugh al the worlde/ for the mone is not so great as all the erthe/therfore she shadoweth not all but onely where she is in the ryghte lygne betwene the erthe and the sonne/¶Thus se we here bynethe the eclypse of the sonne aboue vs whan the mone is ryght vnder the sonne for as moche as she is bynethe the sonne and aboue vs/And than the sonne passeth the ryght lygne and gothe departynge and withdrawyng so moche/ that she appereth as she dyd afore/and whan the mone is departed she is horned thre days after this eclypse/and by this figure ye may vnderstande playnely this that ye haue herde here tofore/



¶ Of the eclypse that happed at the dethe of our lorde god/
Capitulo vii.



THus as the mone taketh away fro vs the lyghte of the sone/ So it happeth ofte tyme that therthe taketh away the lyght of the mone as to fore is declared/ but the eclipses of the mone may in no wyse but whan she appereth moste full ne the eclipse of the sone may not be but whan the mone is all waned & fayled and that we call the conunctyon but yf god which made all thynge chaunge and defete at his pleasure make it to come or happe otherwyse/ like as it happed at suche a tyme as our sauyour Jesu cryste was on the crosse/ at whiche tyme the lyght & bryghtnes of the daye fayled from myddaye vnto the .ix. houre of the day and than was the mone vnder therthe at the full as moche as she myght be/ whiche than in no wise myght empesche the lyght of the sonne/ and the day at that tune was so derke semed as prope nyght/ wherfore sayut Denyse whiche at this tyme is shryned in fraunce/ & beyng an estudyant in grece/ & a paynym he was/ & a great clerke/ for he knewe moche of astronomy/ whan he apperceyued this greate obscuretye and derkenes/ he had vyght great meruayll/ and founde by astronomy that this myght not be by nature ne by reasō/ that the eclypse of the sonne shold happe &

fall in ſuche ſeaſon/than ſayde he a derke worde in this maner/the god of nature ſuffreth greate tourmente by wronge/or ellys all the worlde dyſcordeth and ſhall deſolue and fayll/as it that muſte take amende/and thought in hym ſelfe that he was a greate god that ſo ſuffred/and that he had power and myght aboue all other goddes and yet he byleued on many goddes after his lawes/Than this holy Denyſe made an aulter in his oratory all aboue the other aulters and alſo a parte where as no perſone repayred but he hym ſelf only/bycauſe he wolde not be reputed in myſbyleue/and whan it was made and he had ſene it. he called it the aulter of the god vnknowen & worſhypped and adoured hym/and helde it for a ryght dere and great god/It was not longe after thys that the holy doctour ſaynt Paule cam to this place where ſaynt Denyſe was/as he that knew hym for a ryghte greate clerke/And by commynycacyon and prechynge of ſaynte poule he was ſone conuerted by the helpe of oure lorde whyche wrought ſo therin/that than he had very knowlege how our lorde had ſuffred hys paſſyon/For they were bothe good clerkes as it is more playnly conteyned in their legendes And thus was the noble clerke ſaynt Denyſe becomen a good and a very cryſten man whyche al hys lyfe to fore had be a paynem and he ſo employed his ſcyence and his tyme/fro that day forth on that it auailed hym gretly to the helthe of hys ſowle/thys eclipſe deceyued hi not ne this that he knewe aſtronomye/but he becam after a man of ſo good and holy lyf. that he gate for hys reward the bliſſe of heuen. Cye haue herde the fayte of the Eclypſes yf ye wyll vnderſtande thē well. And ye ſhal not fare the worſe ne the leſſe anayll you/For to know it may moche profyte to euery perſon/for ſuch demōſtraūces ben ſygnyfycacyons of greate werkes and thynges that ofte after happen and fall/This fynde well aſtronomyers by Aſtronomye as ſomtym ſcarcete and defaulte of goodes/of a great derthe of warre or deth of kynges or prynces that falleth in the worlde/as they may enquere and ſerche by their ſcyence and reaſon/This eclipſe that was ſo great/ſygnyfyed the dethe of our lorde/And it oughte wel to come otherwyſe for hym than for another/ For he was and is ryght lorde and kynge/And may defete and deſolue it/and ordeyne at his good play ſyr the other eclypſes comē by nature whych retayn on therthe their vertues of thynges that be come for it behoueth all to fynyſſhe & come to nought to al that is on therthe/& that ſhortly/god made not the fyrmamēt ne the ſterres for nought/whiche as is ſayd goth tornynge ouer & aboue vs/& geueth to the ſterres names

and vertues in heuen and in erthe/ech after his myght on al thyn-
ges that hathe growynge/for there is nothynge in it hathe lone
power for as moche as it hath growynge/suche as it ought to haue
by nature and by reason/we shal now leue for this present tyme
to speke any more of the eclypses/but we shal declare you of the ver-
tue of the fyrmament & of the sterres/for who so euer knewe the ver-
tue of them/he shold know the trouthe of all suche thynges that be
bynethe on the erthe by nature/whether the thynge be obscure and
derke or nat.

¶ Of the vertue of the heuen and of the sterres/ Capitulo. viii.

NOw wyll ye here of the scyence by the which men gette sap-
pience for to know and enquyre the thynges that may happē

in the erthe by the worker of ryght nature whiche is figured by the
worlde/ The heuen and the sterres ben the very instrumentys of na
ture to the worlde by whiche she werketh all as god wylle as well
myghe as ferre/ & who that coude knowe her myght/ he had know
lege of all thynges that is sayde/ as wel of the sterres that ben on he
uen whiche haue vertues on the erthe which god hathe gyuen and
graunted to euerych/ and specially to the sonne and to the mone/
which gyue lyghte vnto the worlde & without whome nothynge
may lyue/ for by them growe all thynges that be in the worlde and
which haue ende and begynnynge/ This thynge consenteth and
permyseth he that is almyghty/ all dyuersytes that be in persones
and whiche haue dyuersytes of makynge and of corsage and all that
happeth by nature/ be it in herbes/ in plantes/ or in bestes/ this hap
peth by the vertue whiche god hathe gyuen to the sterres/ whan he
fyrste created the worlde/ and that he set them & endowed them with
suche nature that he ordeyned them to go rounde aboute the worlde
agaynst the tornynge of the fyrmament/ and by theyr tornyng and
by theyr vertue that lyeth in heuen lyueth all thynges that ben vn
der it/ And yf it pleasyd our lorde that he wolde holde the heuen all
styll in suche wyse that it torned not aboute/ there is nothynge in all
the worlde/ that myghte meue hym/ In hym sholde be no vnderstō
dynge nomore than in a dede bodye/ whiche feleth nothynge ne ther
in is no wytte ne vnderstandynge ne meuynge as he that hathe no
lyfe/ in suche poynte shall euery thynge be whan the heuen shall leue
his meuynge/ ¶ All thus sholde they be and neuer meue tyll that the
heuen had agayne his meuynge/ and than sholde they be otherwise
but who that than myght vse his wytte & se what he shalbe/ moche
myght he se of semblances and of ouers countenaunces in other
men that myghte not remeue them/ for yf there were no meuynge
on the heuen/ there is nothynge that myght nat remeue them/ for
yf there were no meuyng on the heuen/ there is nothyng that might
lyue on erthe/ ¶ Also god wyl that it be so that al thyng hath establis
shed be ryght/ Thus was the wyll of god in whome all vertues na
bounde for to tourne the worlde/ for he made nothynge but that he
gaue to it suche vertue as it ought to haue/ ellys he had made some
thynge for nought & without reason/ but he dyd nat so/ for he neuer
sayled neuer in ony thynge/ he made and created all the sterres/ and
gaue to euerych his vertue/ & wyot that wyll not byleue/ in hym is
neither memory ne reason/ for we se openly that the mone taketh light
whan we se her at full/ for the man that he than nether membre ne

vayne/but that it is full/whan it is in the cours of humours & such thynges/& in lyke wyse it happeth on all beestes/for they haue than theyr hedes and other membres more garnysshed of marey and of humours/and the see also floweth & ebbeth in his cours euery moneth wherof it happeth that they that be nyghe the see whan they knowe that the mone is full/they withdrawe them fro the see on hye places/& saue thē selfe/& in this poynte they wythdrawe them and holde them in hye places vnto the tyme that the see withdraweth & cometh agayne/and thus do they euery monethe/but all this happeth by the mone which is one of the seuen planets/In lyke wyse it is sene of the sonne/that after the wynter whan he begynneth to mounte/he causeth the fruyte to be brought forthe of the erthe/and appayrayleth the trees with leues/and al verdure to come agayn/And the byrdes begynne agayne theyre songe for the swetenes of the tyme/And whan he rebaisheth & declyneth/he maketh the wynter to come & causeth floures & leues to fall and fall so longe tyll he begyn to mounte agayne/Sythe that these two sterres haue suche vertues/and cause suche thynges to be done/The other whyche be portrayed on the heuē were not made to serue of nought/but to euerych is ordeyned his vertue and his ryght after his nature/wherfore they make dyuersytes in thynges that be on the erthe/And the meuynges of tyme/of which the one cometh sone and the other late/And the fruytes that come on the erthe/Some come sone and some come late/& somtyme they be soner rype in one yere than in an other. & thus chaūge in sōdry maners/Of the wynter it happeth ofte that they chaunge so that one is more colde and rayny than the other/

¶ The one yere is dere of vytayles/and another is very plenteous/

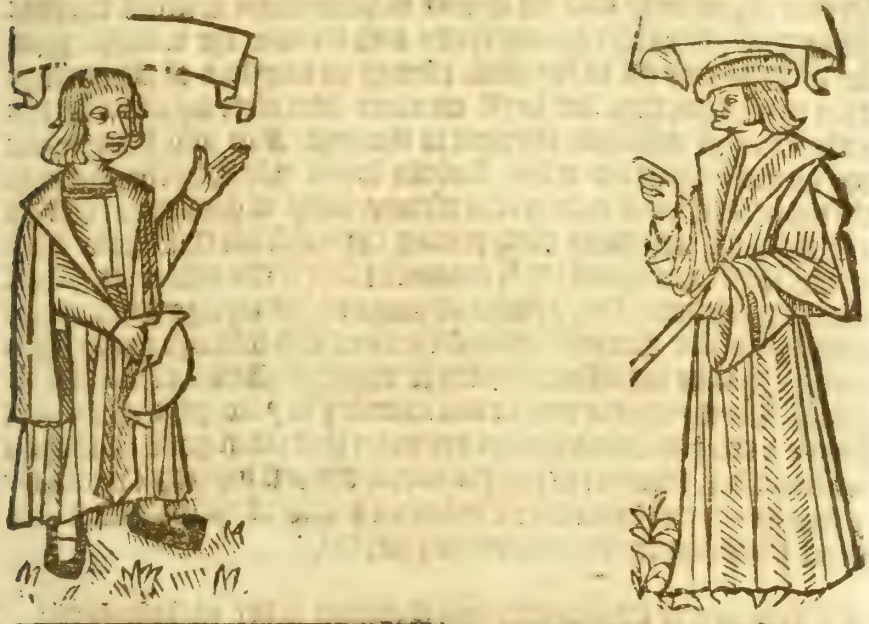
¶ And also it is ofte seene that there is greate plentye and very good chepe in one yere/In another yere it is hadde in great scarcenes/& this falleth oftentymes/and somtyme it falleth not/All these dyuersytes cause the sterres whiche ben on the heuen. ¶ But all this is by the wyle of our lorde that hathe sette euery one in his propre place/where he maketh naturally his course/and euerych dyuersly/

¶ For yf none other thynge had his vse in tymes saue the sonne only without more/as he that gothe swyftely by the fyrmament euery yere/and mounteth as moche and as hye in one somer as in another/and as moche descēdeth in one wynter as in another euery day egally tylle that he come into his ryghte poynte/ ¶ And
Joyneth that other after hym where as he was to fore/ ¶ This

knowe well Astronomyers that he gothe euery yere aboute the heue
one tyme/And where he is this day/in the same place he shal be this
day a yere. Therby is it knowen that yf none other hathe
no power than sholde euery yere be lyke other/& euery yere alway
sholde be lyke as the yere tofore was/and euery moneth sholde be
lyke the same as euery ych sholde come/that is to wete one Januyer
lyke another Januyer/& februaryy lyke another/& in lyke wyse all
the other.xii.monethes/for the sonne goth all lyke in one moneth/ As
he shall the nexte yere in the same monethe/and this day sholde rese
ble and be lyke vnto this day a yere in all maner thynges/that is
to wete of hete/of colde/of fayre wether/of raynes/and other thyn
ges eueriche after theyr comynge all the yere durynge/than sholde
it falle by ryght nature in all the somers/and all the wynters that
euer haue ben and shall be sholde not come no dyuersytes/and all
the tymes sholde be lyke as they that by the sonne sholde be alway
demened/eschaunged/and contynually gouerned/for he goth egally
alway and endeth his cours euery yere and holdeth hys ryght waye
in one estate/as he that gothe nat oute of his waye/Thus is he the
ryght patrone of all the other sterres/for it is the moste fyne of al the
other by the great clernes that is in hym/and in all thynges by hym
and he hath on the erthe more power on thynges of which may be
enquyred of nature reason and ryghte than all the other sterres/ yet
somtyme they restrayne his heetes and after they enlarge them after
that they be ferre or nere/as he otherwhyle hathe nede/lyke vnto a
kynge whiche is the greater lorde and the more myghty in hym self
for his hyghnes than any other of the people/Neuer theles he hathe
somtyme nede of them for to be holpē & serued of them/for how moche
the nerer he is to his people/so moche more is he the stronger and
puyssaunte/And therfor her he withdrawethfro his folke/so moche
the lesse he erployeth of hys worke/¶In lyke wyse I say to you of
the sonne whiche is as ye maye vnderstande/the greatest/the moste
myghty/& the moste vertuous/& he hath greater power than ony of
the other sterres haue/but the other haue theyre power euerych in
his degree/But sythe we haue declared to you after the beste wyse
wyse that we can of the vertue of the fyrmamente/we shall declare
to you how the worlde was measured as well in heyght as in depe
nesse/& on all sydes/of lengthe and of brede by them that knew the
reasōs of the seuen scyences/Of which Geometrys one/by which
the sonne/the mone/the erthe/and the fyrmament be measured as
wel within as without/how moche it is of greatnes/& how moche

it is fro the erthe to the fyrmament/ & all the greatnes of the sterres/ for this is proued by ryghte beholdynge/ & they that founde this science perceyued that it myghte not be knowen truly by astronomye ne the nature of the sterres without knowynge of theyre measures/ Therfore wolde they measure them & preue all theyr greatnes/

¶ wherfore and how they measured the worlde/ Ca. ix.



Fyrste of al the auncyent philosophers wolde measure the greatenes of the worlde all rounde aboute the erthe tofore any other worke/ by which they proued the heyght of the sterres and the greatnes of the fyrmament all aboute/ and they coulde not fynde more greater measure to be measured/ & whan they had measured the erthe howe moche it had of largenes/ and howe moche it had of thyckenes thrughe/ & they enquyred after of the mone because it was

leste lyne fro the erthe and moſt nyghest therto .And after they enquyred of the ſonne how ferre it was fro the erthe/and how moche the body therof had of greatnes/and they founde it more than al the erthe was. And whan they had meſured thyſe thre thynges/ the Sonne/the mone/and the erthe/they myght lyghtely after enquire of the other ſterres/howe moche euerych is nere or ferre. And the greatnes of euerych/of which they founde none/but his body were of more gretenes than all therthe is excepte only thre of the planetes without more whiche ben Uenus/Mercurye/and the mone/ which is the thyrd/& euery mā may enquere thys.yf he knowe the ſcyence of geometry and the ſcyence of aſtronomye with all/for that he knowe fyrſt to fore he may fynde and knowe the trouthe. But for as moche as all be not good clerkes ne maiſters of aſtronomye that may proue thys .we wyll recounte here after how moche the erthe is longe/and how thycken is thurghe/And alſo how moche the mone is aboue the erthe /And the ſonne alſo whyche is aboue the mone/and how moche eche of them hathe of greatenes/lyke as the kynge Tholomeus hath preued /And alſo we ſhall ſpeke after that of the ſterres and of the fyrmament/but fyrſte to fore al I ſhall recounte to yow of the faytes and dedes of the kynge Tholomeus whiche knewe ſo many demonſtraunces and loued ſo moche aſtronomye that he wold ſerche all thyſe thynges /And we ſhall ſaye to you of ſome thynges which be not contrary to yow /yf ye wyll vnderſtande & reteyne them by whych ye maye lerne ſom good .And than after we ſhal meaſure to you the worlde the beſt wyſe that we may/ Now ētēde ye of the kynge Tholomeus and of the werkes of ſom other philoſophers for your owne profyte/

¶ Of the kynge Tholomeus and of ſomme other philoſophers/ Capitulo decimo.

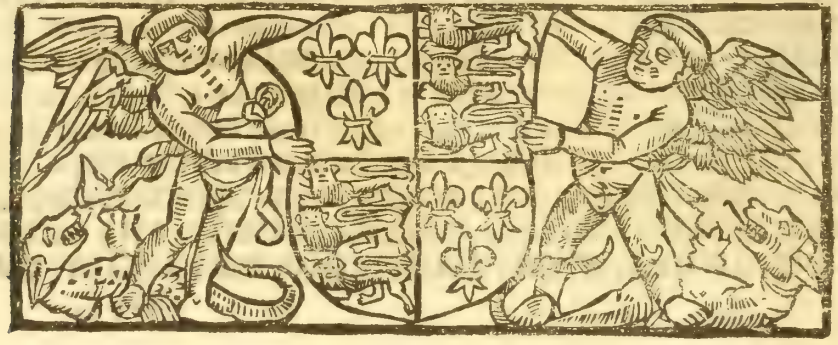
Tholomeus was a kynge moche ſubtyl in aſtronomy this Tholomeus was kynge of egipte/which helde his cõtrey longe tyme. There were ſomtyme many kynges that were named Tholomeus/but amonge the other this was he that knewe moſte of aſtronomye and that moſte enſerched of the ſterres/and moze vnderſtode of thē/And he made dyuerſe bokes and dyuers inſtrumētis by which was founde the greatnes of therthe/and the heyghte of the firmamēt/& how the ſterres make their cours by nyght & by day/ By hym were founde the ozyloges of the chyrches which begynne at the houres of the dayes and of the nyghtes/for the prayers that be ſayd in the chyrches pleaſe moze our lorde than they that be ſayd in other places/& therfore the ozyloges be neceſſary in euery chyrche And mē ſerue god the better in due tyme/& fare the better/& lyue the longer/for yf they ruled them ſelfe to praye at a certayne houre and at an other certayne houre in lyke wyſe to eate/and other at his due houre/it ſholde be a very lyghte thynge to do/and pleaſe god well/

¶ If men wolde apply them as well to suche thynges as they do to that whiche confoundeth & sleeth them/that is to wete that they be al enclyned to conquere the goodes & rychesses/of which they cease not night ne day/and wene to prolong theyr lyfe therby/but they amasse and gette great treasours/and so they purchase theyr dethe/ For by the great goodes that they assemble on all sydes/they put thē in suche thought and payne that ofte they lese theyre wyttes & vnderstandynge/so that they may not enclyne and thynke on the workes that touche theyr saluacyon as they ought to doo/& by such workes sholde they be in more ease and lyue longer and please our lorde god the better//and sholde also haue more ease of body and of soule/ but they loue so moche the wynnynge of the goodes of the worlde that they leue that whiche sholde more auayle and profyte them/

¶ I wote neuer wherfore they gette this honour and good/for they lose therby the ease of the worlde/bycause whan they wene to sette them in ease & to be in pease/than cometh dethe and maketh them to dye with ryght great sorowe/for the greate couetyse of the good & the payne that they haue made alway to gette it without ordynaūce and measure hathe moche the more hastyer brought them to theyre dethe/ And so ben many men dede/that yf they had ordeyned their affayres and besynesses as they ought to do at euery houre competently and by ordre/whiche yet had ben alyue and in good helthe/& thus may you se how they abbredge theyr dayes and auaunce theyr dethe for their goodes/for at lengthe nature may not suffre dyuers mayntayns vnreasonable ne the sodayn agrauacyons ne greefs/ of which by theyr folyes they trauayl nature/& it displeaseth moche to god/And also no good may come therof/but gladlyer & with better wyll they trauayll and more dylygently for to wynne and gette the worldly goodes than the loue of god/and neuer do they thynge by ordre/ One daye gone they erly to the chyrche/and another day late/or at suche an houre as they wene that it shal not hurte them to auaunce theyr gaynes and wynnynges. ¶ Thus they go neuer to chyrche for to pray vnto god vnto the tyme that they wene that they shal wynne no more worldly goodes/but they wynne the lesse/for they serue god in vayne/and god shall rendre to them theyre rewarde/and they shal bye it ryght dere that they leue to serue hym/ for he may rendre to them more meryte in one day/than they may gette in a thousande yere/ ¶ Suche people ben tolles and euyll aduysed/whan of nought they wene to serue hym that all knoweth and all seeth/ye/the leste thoughte that they thynke/there ben

yet some whan they go to chyrche they go not in entencyon to pray to god but only for to gette the loos and glory of the worlde/and pray more for their goodes that god shold kepe and multyply them than they do for the salvacyon of theyr sowles which ben in great parryll to be perysshed/And it is a great marvayll of suchmaner of people that thynke well in theyr hertes and know well that it is evyll that they do/yet for all that they amende them not/of which it is great pyte which is so feble a thynge from whom all evyls sourde/Truely the devyll is full of myquyte and without power & strengthe over any persone of hym selfe//for he may not vaynquysshe ne overcom/ but hym that consenteth to his wyll/for who that wyll conduyte and rule hym selfe well/the myquytes of hym may not noye ne greve ne in no thynge travayll hym/of which he hath cause to sorowe for/ as longe as he wyl dyspose hym to do well/than may well be sayd fye/for they be more than fayled whan he overcometh them so feble and taketh them in theyr evyll dedes and synnes and ledeth them to perdycyon/where they never shalbe without payne/ne never shall have Joye/ne in no wyse have hope of mercy of thys purpos/we shal saye no more now, but recounte of kynge Ptholomeus/ The whiche employed his tyme in the werkes of our lorde god/out of his bookes were drawen the nombres of which the yeres be ordeyned/And of the same is founde the cours of the mone/ By whyche is sene whan she is newe/of suche Julyus Cezar whiche of Rome was emperour made a booke called the lome/the whiche is full necessary for the chyrches/and it declareth the golden nombre of the kalender/ For by the kalender is knowen the cours of the mone/and of all the yere/by which is also knowen how we ought to lyve after reason every daye/That is to wete in etyng and dryntkyng/and in worshyppynge our lorde on hye days and on symple/and for to solempnyse suche dayes as holy chyrche hath ordeyned and by blessyd sayntes establysshed/ ¶ By the kalendre we knowe the holy tymes as the embre dayes/The lente/advente/And the hye dayes and festes that we be most bounde to serve god/for to gette the Jhesymable Joye and glorye/ whyche our lorde hath promysed vnto his good and trewe frendes which with good herte serve hym/ All thys lerneth vs the kalender/the whych was drawen out of Astronempe whiche the good kynge Tholomeus loved so moche and he knewe more than anyother man save adam whych was the fyrste man/For Adam knewe all the.vii.sciences lyberal emperly without fayllyng of a worde/as he that the creatour made & foarmed with

his propre handes/And so wolde our lorde haue hym souerayn in beaute/in wytte/and strength ouer all them that sholde be borne after hym vnto the comyng of Jhesu Crystesonne of god/The which had gyuen to hi suche vertues ne neuer aft Adam gaue he so moche to one man ne neuer shall/But anon as he had consented and cō-mysed the synne defended he loste so moche of his wytte and power that anon he becam a man mortall/¶And he was suche tofore er he had synned that he sholde neuer haue felte dethe/Ne all we that descende of hym sholde not haue lesse meryte than he/Jn ioye/in solas and in deduyte of parydys terrestre all togydder and borne and nourysshed without synnes/and after in heuen glorysyed/but sythe they talted of the fruyt which god defended them his wytte and his entendement were so destroyed and corrumped by hys synne that all we be entetched and foyled therby/Ne there is nothynge vnder the fyrmament/but it is worse syns than tofore and of lesse valew/¶And the sterres gyue lesse lyghte than they dyd before/Thus all thynges empayred of thar goodnes & vertues by the synne of adam which god had made for man/as he that wolde make hym mayster of all the goodes that he had made/But anon as he had commyted the synne he felte hym so bare of his wytte/and entendement that hym semed he was all naked and that he had lore all goodes as a man putte in exyle/But notwithstondynge this yet abode with hym more witte/strength/and beauty/than euer ony man had syns And to the regarde of these thre vertues that Adam had/the kynge Dauyd that was so vertuous and wyse had two sonnes whiche mygyt be compared the one to the beaulte of Adam and that other to his wysdome/¶Absolon mygyt be compared vnto his beauye/ and Salamon vnto his wytte and vnderstandyng/And also Sāp son the stronge vnto his strengthe/Thus were these thre vertues in Adam so perfytely that no man sythe mygyte compare with hym.
¶But for this tyme let vs speke no more of this/but we wyl shew to you how the seyences were saued agayns the flode/



¶ How the scryptures and scyences were saued agaynst the flode. Ca. xl.

Sythe Adam was dede there were many men whiche lerned the scyences of the.vii. artes lyberall whiche god had sent to them in the erthe/ Of whome some there were that wolde enquyre what sholde become of the worlde or euer it sholde haue ende/ And they founde verely that it shall haue ende twoyes/ At the fyrste tyme by water/ but our lorde god wolde not they sholde knowe whether it sholde be fyrst destroyed by water or by fyre/ Than had they great pyty for theyr scyences that they had which so sholde perysshe. ¶ Than they deuysed a waye as they that well wyste that after the fyrst destruccyon of the worlde there sholde be people/ wherfore they dyd do make greate pylers of stone in suche wyse that they myghte portraye and graue in euery stone at the lefte one of the.vii. scyences

xli

entyerly in ſuche wyſe that they myghte be knowen to other/ ¶ Of which ſom ſaye that one of theſe pylers was of a ſtone as harde as marble/and of ſuche nature that water myghte not empayre it ne mynyſſhe it/ And they made other in a maner of ſtronge tyles all hole without any Joyntures that fyre myght not hurt in no wyſe ¶ In theſe great colompnes or pyllers as is ſayde were entaylled & grauen the.vii.ſcyences in ſuch wyſe that they that ſholde come after them ſholde fynde and lerne them/

¶ Of them that founde the ſcyence & the clergy after the flode/ Ca. xii.

Syemaye vnderſtande the ſeuen ſcyences lybe rall were founde by auncyent wyſe men out of whiche all other ſcyences procede/ Theſe were they to whom our lorde hath gyuen them and en ſygned doubtynge the delu that god ſente in to the erthe/the which drowned all creatures/and reſerued Noe and them that he toke in to the arke with hym/ ¶ And after this the worlde waste

peopled and made agayne by them that deſcended of them/ for af
ter the tyme of Noe the people began to make agayne howſes and
manſyons and to make redy other werkes/ but this was moche ru
dely as they that coulde but vyght lytyll vnto the tyme that theſe ſcy
ences were founde agayne and than coude they better make and do
that that was nedefull for them/ and founde remedy for theyr euyls/
¶ The fyrſte that euer applyed hym therin for to enquyre and ſerche
theſe ſcyences after the flode was Sem one of the ſonnes of Noe/
whiche had gyuen his courage therto/ and he dyd therin ſuch dyly
gence and ſo contynued that by his wytte he founde a party of aſtro
nomy. ¶ After hym came Abraham whiche alſo fonde a
great party of aſtronomy/ and after hym were other that vſed their
ſyff the beſt wyſe they myght ſo moche that they had the prynoyples
and reaſons of the ſeuen ſcyences/ ¶ And after cam Plato the ſage
and vyght ſouerayn in phyloſyphye/ and his clerke named/ Arito-
tle the wyſe clerke/ ¶ Thys plato was the man aboue all them of the
worlde in clergye the moſt experte of them that were to fore or after
hym/ he proued fyrſte that there was but one that was onely ſoue
rayn/ whyche all made and of whom all good thynges cometh/ yet
his bokys approue hyely that there is but one ſouerayne whiche all
made/ And of whom all good thynges cometh/ yet hys bookes ap
proue hyghly that there is but one ſouerayne god/ that is our lorde
god whych made all thynges/ and in thys only veryte/ he prouyd
the vyghte trouthe/ for he proued his power/ his wyſdome/ and his
goodnes/ Theſe thre bountees reclame all cryſten men/ that is the
fader/ the ſonne and the holy goſt/ ¶ Of the fader he ſayde the po
wer & puyſſaunce/ Of the ſonne ſappyence/ and of the holy goſt the be
nyuolence/ And Arystotle which cam after hym holdeth plentye of
thynges nyghe to hym/ and knewe the thynges that he had ſayde
And ordeyned vyght well the ſcyence of Logyke/ for he knewe more
therof than of other ſciences/ Theſe .ii. notable clerkes foude by their
wyſedome & cōynge/ thre perſones in one eſſence/ & yneuydit/ but
they put it not i latyn/ for bothe two were payenems/ as they that
were more than .iii. C. yere to fore the comyng of our lorde ieſu cryſt
And all the bookes there in greky ſſh lettres/ After cam boece which
was a great phyloſopher & a vyghte wyſe clerke/ whech coulde dy
uerſe langages/ and louyd moche vyght wyſnes/ Thys boece tran
ſlated all theyr bokes the moſte party and ſette them in latyn/ But
he dyed before he had all tranſlated them/ wherof was greate dam

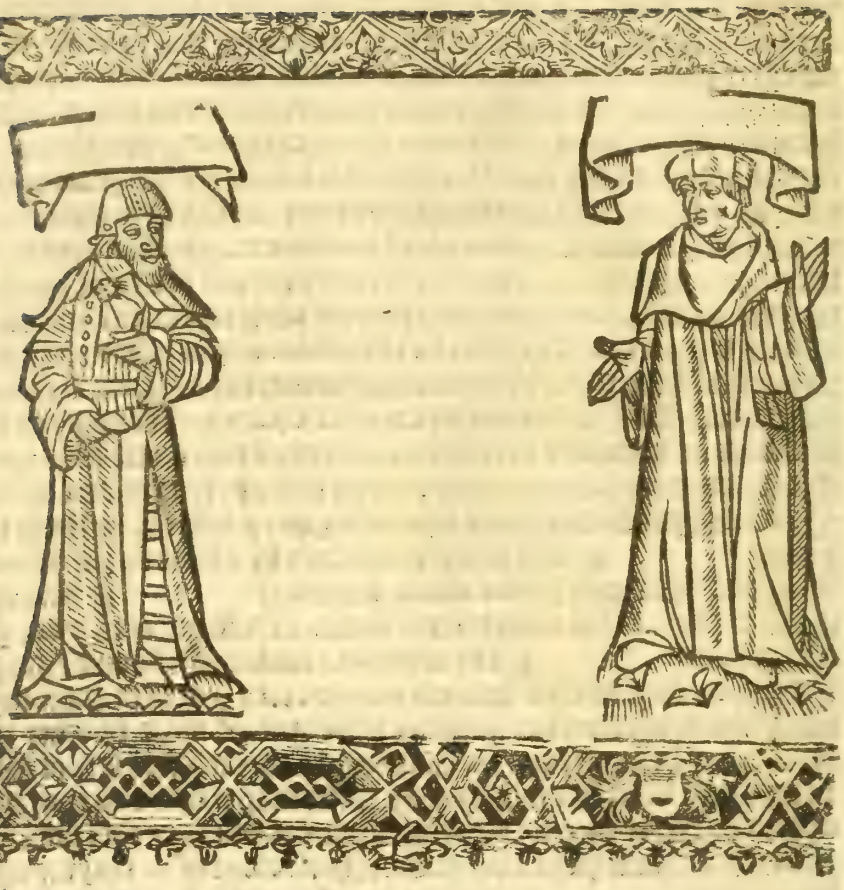
mage for vs all/Syth haue other clerkes translated/but this booke translated more than ony other/ ¶ The whiche we haue yet in vsage/And compyled in his lyfe plente of fayre volumes/of whiche we haue yet great nedefor to adresse vs towarde our lorde god/& many other good clerkes haue ben in this worlde of great auctorite which haue lerned and studyed all theyr tyme vpon the sciences of the.vii.artes/Of whiche haue ben some that in theyr tyme haue domeruayls by Astronomy. but aboue all them that moste entremeted and trauayled vpon the science of astronomy/was Vyrgyll the which compyled many meruelous workes/and therfore we shall recounte a lytell here folowynge of the meruayles that he dyd/

¶ Here folowe in substaūce of the meruayles that vyrgyll wrought by astronomy in his tyme by his wytte/ Ca. xxii.

Tirgylle the wyse philosophre born in Italye was to
fore the commyng of our lorde Jhesu Cryste he sette
not lytyl by the .vii. sciences / For he trauayled and
studyed in them the moste parte of hys tyme so moche
that by astronomye he made many great merualles
For he made in Naples a flye of copper / whyche whan he hath sette
it vp in a place / That flye enchaced and hunted away all other flyes
so that there abode none in any place ne durste none approche ny
ghe to that flye by the space of two bowe shote rounde aboute / And
yf ony flye passed the bounde that Tirgylle had compassed / incontí
nent it shold dye / and myght no lenger lyue / He had also an hors of
brasse / the whyche garysshyd and heled all hosses of all theyr mala-
dyes and sykenesses of whych they were entrechid / also sone as the
seke hors loked on the hors of brasse / Also he foũded a meruaylous
cyte vpon an egge by suche force & power / that whan the egge was
meuyd al the cyte quaued & shoke / And the more the egge was me-
uyd the more the cyte quaued & trembled / The cyte in hye & lowe
& playn / The flye of copp & hors of brasse that Tirgylle thus ma-
de ben in Naples / And the cage where the egge is in / all ben there
seen / Thys hath be sayd to vs of them / that be comen fro thens and
that many tymes haue seen them / Also he made that in one daye all
the tyre thurgh out Rome kaylled & was quẽchid / i suche wyse that
no persone myght haue none / But yt he wente & setteit at the natu
re of a woman wyth a candel or otherwyse / And she was doughter
of the emperour & a great lady whych to fore had don to hym a great
sclaunder and dysplesure / & all they that had sette it at her myght
not abresse it to other / but euerych that wolde haue tyre muste nedes
go fetche it there as the other had it / And thus was he auenged
on her / for the dysplesure that she had don to hym / Also he made
a bridge vpõ a water the greatest that euer was made in the world
And is not knowen of what mater it is made whether it is of stone
or of wode / But there was neuer workeman / Carpenter / ne ma
son / ne other that couldesc moche knowe / ne enserche wythin the
erthe ne within the water that they coude deuyse and knowe how
that bredge was there sette / ne how it was sulteyned in no maner
ne at endes ne in the myddes / and men passed ouer itrely / And all
without letting / He made a gardeyne al about rounde cloied with
the ayre / without any other closure / whyche was as thycke as the
clowdes / And thys gardyn was tyght hye tro the erthe / he made al
so two tapres & a lampe lyght & brennynge contynually without

quenchynge /Thise thre thynges he enclosed wythin the erthe in
such wyse that no man can fynde it for all the crafte they can deuise/
¶ yet made he an hede to speke/wyche answerd of all that wych
he was demaunded of/And of that which sholde happen and come
in the erthe So on a daye he demaunded of the hede how he sholde
do in a certayne werke where as he sholde go vnto/¶ But the hede
answerd to hym in such wyse that he vnderstode it not well. For it
sayde that yf he kepte the hede/he sholde come agayne all hole/and
wyth thys answere he wente his waye wel assured/But the sonne
which that day gaue great hete smote hym on the hede and chaufed
hys brayn/of wyche he toke none hede/that he gate therby a seke
nes and malady wherof he dyed/for whan he had the answer of the
hede that he vnderstode not that he spack of hys hede/but vnderstо
de of the hede that spake to hym/but it had be better that he had kept
wel hys owen hede /And whan he felte hym self a greuyd wyth seke
nesse/he made hym to be borne out of Rome for to be buryed in a Ca
stel beyng toward Selyle /and a mylle nyghe to the see /¶ yet ben
there his bones/which ben better kept than any others ben/¶ And
whan the bones of hym ben remeuyd /The see begynneth to encre
as and swelle so greatly that it cometh to the castell /and the hyer
they be reysed vp/The hyer groweth the see in suche wyse that the
castell shold be drowned yf they were not anone remysed and sette
in their place but than whan they be setteagayn in theyr place anō
the see aualeth & goth away there as it was tofore/
And thys hath be oftimes proued/& yet endure the vertues of hym
as they saye that haue ben there/Vyrgyle was a moche sage & sub-
tyl clerke and full of great engyne /For vnto his power he wolde
preue all the vsages of clerkes/as moche as was possyble for him to
know/¶ He was a man of lytell stature/a lytel courbed he was on
the back by ryght nature/And wente hys hede hangyng down and
beholdynge the grounde/¶ Vyrgyll dyd and made many meruay
les/wyche the herers sholde holde for lesynges yf they herde them
recoũted/For they wolde not byleue that another coulde do such thyn
ges/as they coude not medle wyth/And whan they here spoken of
suche maters or of other that they see at theyr eyen/ And that they
can not vnderstonde ne knowe not therof/Anon they saye that it is
by the helpe of the fende that werketh i suche maner as they that gla
dly myssay of peple of recomendacyon/and also say it is good not to
conne suche thynges /but yf they knewe the sciences and maner /
they wolde holde it for a moch noble and right werke of nature/and

wythout any other especte of euyll/And whan they knowe not ne vn
derstande the thynge/they saye moche moze euyll than well/ ¶Cer
taynly who that well knewe well astronomy there is nothynge that
is in the wozlde/of which he coulde enquyre by reason but he sholde
haue knowlege therof/And many thynges sholde he do that sholde
seme myracles to the people wyth that knewe nothynge of the scy
ence/ ¶I say not but there myghte be done euyll by hym that coude
it. Foz there is none so good a bacell but there may be therin nought
herynge/ Noz god made neuer so trewa golpell but some myghte
tourneit contrary to trouthe/and there is nothynge so true/but some
myghte so gloset that it myghte be to his dāpnacyon who that wolde
payne hym to do euyll/how well it is no mayntry to do euyl/Neuer
shall the euyll dysposed man saye well of that which he may not vn
derstande ne knowe/There is no craft noz scyence/but it is good
to be knowen whan a man wyll gyue and apply hym selfe therto/
But lette hym do nothynge agaynste god by whiche he leseth his
grace/ ¶All thynge is knowen by Astronomy saue suche
thynges as god wyll sholde not be knowen/ ¶And so it
is better to lerne that than to lerne to amasse and gader togyder gre
at treasours/ ¶Foz who that coude Astronomye yzoze
ly/he sholde haue all that he wold haue on erth/Foz hym sholde fayl
nothynge/what someuer he wolde haue/and yet moze/but they had
leuer haue the moneye/ And they knowe not that it is of Astro
nomye/noz wherfoze money was fyrste made/how be it that they
applye all theyre entendement foz to haue it/but they care not foz to
lerne/saue that whiche they knowe shall retourne to theyr synguler
profyte/ ¶And yet foz all that we shall not leue/but
that we shall recyte some case foz them that haue talēge foz to lerne/
& lette hym herkyn and take hede that wyll vnderstande it.



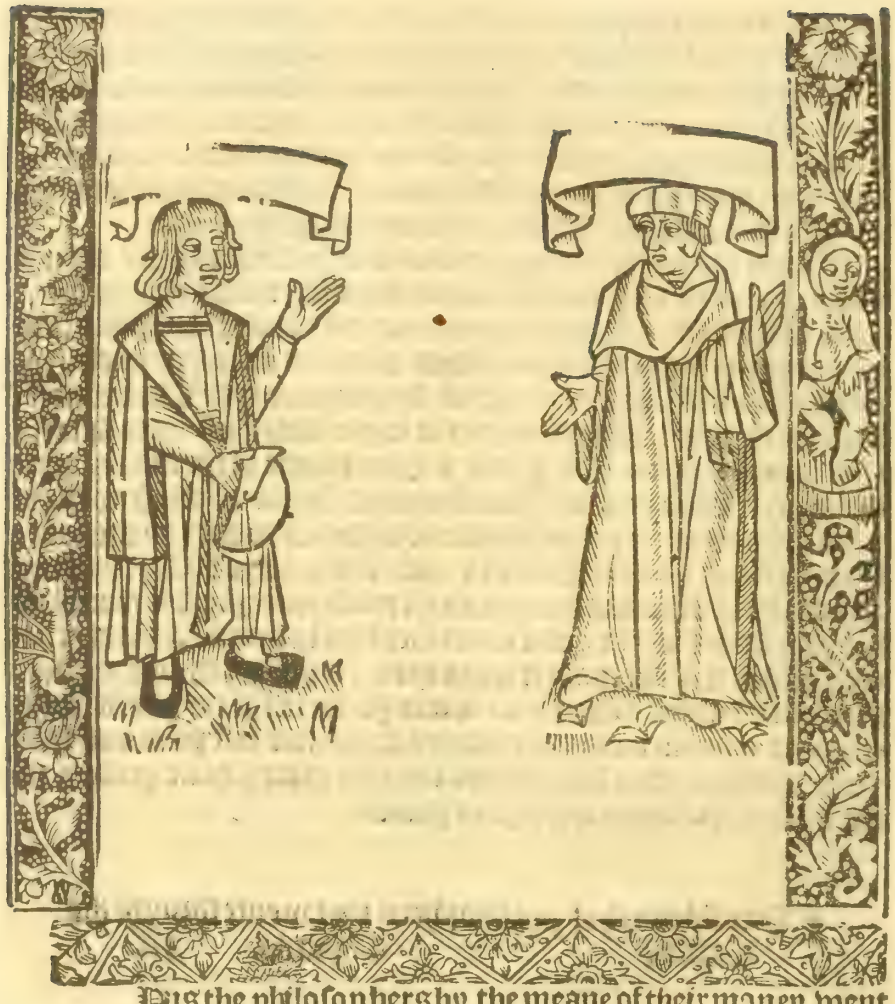
¶ Here declareth for what cauſe money was fyrſt eſtablyſſhed/ Capitulo. xxvi.

THe money was fyrſte eſtablyſſhed for as moche as they had not of all thynges neceſſary to gyder/That one had whete/another had wyne/and another clothe or other wares/he that had whete/he had no wyne wythout he chaūged one for another/and ſo muſte they dayly chaunge one for another/for to haue that they had not as they that knewe no otherwaye. When the phyloſophers ſawe thys they dyd ſo moche that they eſtablyſſhed with the lordes ſomtyme reygnynge a lytell thynge wlych euery man myght bere with hym to bye that was ne deſull to hym and behouefull for his lyfe/and ſo ordeyned by aduyſe

togydre a thyng which was not ouer dere nor holden for ouer byle and that it were of some value for to bye & vse withall true marchā dyse one with an other/and that it were comon ouer al/and estabied than a lytell money whiche sholde go and haue cours thrughe the worlde/And by cause it ledde men by the waye and mynystred to thē that was nedefull/it was called money/That is as moche to saye as gyue to a man all that hym behoueth for his lyuynge/

¶ Monos in grekysshe langage is as moche to saye as one thynge onely/For than was but one maner of money in all the worlde/ But now euery man maketh money at his pleasure by which they go out of the way more than yf there were but one coyne onely/For by this cause is sene ofte plenty of dyuers moneys/Thus estabiyf shed not the wyse phylosophers/For they estabiyshed for to saue the estate of the worlde/And I saye it for as moche yf the money were out of grotes and pens of syluer so than it sholde be of lesse weyght & lesse of valewe/and that sholde be better for to bere by the waye for pore folke/& better sholde be eased for the helpe of theyr lyuynge And for none other cause it was ordeyned fyrste/For the money ys not prayised but for the golde and syluer that is therin/And they that estabiyshed it fyrste made it ryght lytell & lyght for the more ease to be borne all about where men wolde go/for in the reygne of kynge Edwarde was no money curraunt in Englonde but pens and halfe pens & ferthynges/& he ordeyned furthe the grote & halfe grote/& no ble/halfe noble/and ferthynge in golde/

¶ Here folowyth of phylosophers that wente thrughe the worlde. Capitulo. xv.



Thus the philosophers by the meane of their money went thrughe the worlde/And the marchaunnres/or in pylgrymages/or in purchasynge and enquyrynge some places that they wolde knowe/of whome there were many whiche were philosophers/& that wolde haue experyence of all thynges & they went by see & by lande for to enserche the very trouthe of the secrete thynges of heuen and of erthe/ They rested them not by the great fyres as some do now in thele dayes/the which gyue them to do no goodne applye to ne vertues/but yf it be to haue the prayssyng of the worlde/But they wente serchynge to & fro for to knowe the better the good and the euyl/and for to conne deserne the one fro the other by the whiche they endured meruaylous many greate trauayles

for to gette the saupnge of theyr soules/and at this day al men la bour to gette ryches̄es and treasour and the name to be called mayster for to gette loupuge & honoure of the worlde whiche so hastely sayleth/ ¶ Certaynly an euyl man may not thynke on hye thynges/ For who that is of erthe/to the erthe entendeth/And who that pretē deth god/ God attendeth to hym/For god hym selfe sayeth/ who that is of erthe/speketh of erthe/ And who that cometh fro heuen/ vnto heuen pretendeth he without other/ ¶ The philo so phers that wellcoulde vnderstande this worde had moche leuer to suffre trauayles for to lerne than to entende to worldly honoures/ For they helde the scyences & clergyes for more dere and worthy thā all the seygnouryes of the worlde/ ¶ Plato whiche was a puissaūt and a recōmēded mayster of Athenes lefte his noble estate and his place by cause he wolde lyue of suche renowne/ And had le uer haue payn & trauayll for to enserche trouthe/and for to haue scy ence/ thanfor to haue seygnoury & domynacyon in the worlde ne re nowne for to be mayster/For he wolde say nothynge but yf he were certayn therof/For any vayne glory of the worlde/Apolines which was so great a prynce lefte his empyre/and his royalme/and depar ted all pore and naked for to lerne the scyences. And he was taken & solde oftymes to strange men/ Ne neuer was there none of them so valyant of all them that bought and solde/that he sette ought ther by so that he myght alway lerne/and trauayled more on all partyes for to lerne and knowe god and the worlde/whiche he loued better than any other worldly thynge/and he went so ferre that he founde syttynge in a trone of golde an hye philosopher and of greate re nowne/the whyche nsygned and taughte his dysciples within his trone where he satte & lerned them of the faytes of nature of good maner the cours of the dayes and of the sterres/and the reason and sygnyfyaunce of thynges touchynge of sapience and wysdom.

¶ This philosophre was named hyarchas/ After Appolynes ser chyd by many contreys so ferre that he founde the table of fyne golde which was of great renowne & it was named the table of the sonne wherin all the worlde was portrayed/ ¶ Therin sawe he and lerned many pointes and many mernailes/which he loued more than ony thynge/he erred so ferre by strange londes that he passed the flode of Ganges and all Inde/and in the ende so ferre that he myght fyn de no more way/& where someuer he cam he founde and lerned al way suche as myght auayle and profyte to hym selfe and another for to auaunce hym to more god.

¶ And also the kynge Alysaundre suffred trauayllesw ithout nombre for to lerne/but he wente fro place to place in estate ryall/ And with great puyssaūce of people/wherfore he myght not so well lerne nor enquyre the trouthe of thinges/ ¶ Pyrgyl also went thaughmany contreis for to enquire and serche the trouth of all thynges/ ¶ Tholomeus whych of Egipt was kynge/wente by many contreys & Realmes for to lerne experyment and see al the good clerkes that he myghte fynde/

¶ Sayute Brandon neuer leste for to laboure by see and by lande for to se and lerne/ ¶ And he sawe plentye of great merueylles/ ¶ For he cam into an yle of the see/where he saw certayn byrdes which spake as spyrytes/which sayde to hym som thynges whych he demaunded of them the vnderstandynge/

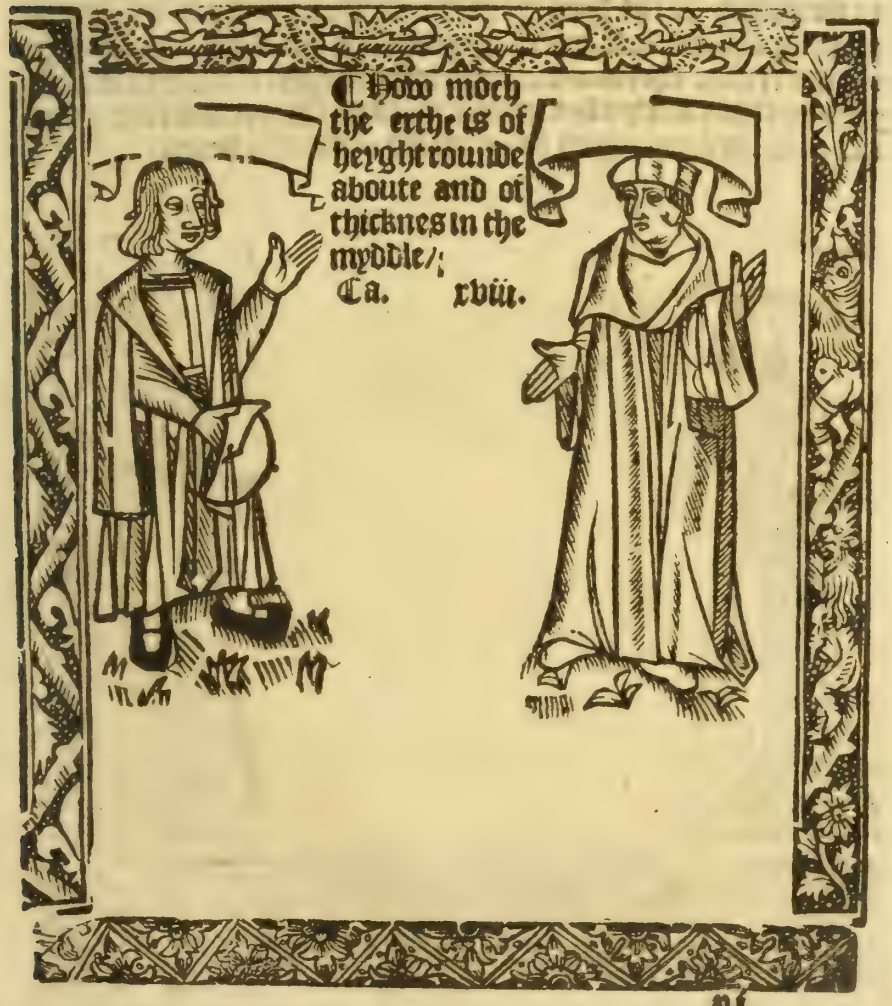
¶ And so ferre he erred that he founde one so perylous a place and so full of spyrytes in so terryble tourmentys/that they coulde not be nombred ne estemed/ ¶ Amonge whom he sawe one that answered & sayde that he was Judas that betrayed Jesu cryste/ whiche euery daye was tormented an hondred tymes and dye he myght not/and pleutye of other great mrueilles he sawe as alonge is recounted in the legende of hys lyfe/ ¶ There woere many other philosophers that serched the worlde for to knowe the better the good and the euyll/for they beleuyd not a thynge tylle they knewe it verely/ ¶ But they enserchyd by see and by lande tyll they had enserchyd all/& after retorned agayne to theyr studyes alway for to lerne the vertues & good maners/& thus loued so moche philosophy for to knowe them selfe the better in good and iustlyfe/ But bycause that we haue spoken of philosophye that so moche goodcometh therof that a man haue therof vnderstandynge to knowe and loue god/therfore we shall tell to you what it sygnifyeth.

¶ What thynge is philosophy/& of the answere that Plato made therof/

Dyloſophy is to haue knowlege of god and fyne loue of ſapyence/ And to knowe the ſecretes and ordynaunces of dyuyne thynges/ and of humayne/ For to knowe god and his power and what a man oughte to be/ to that he myghte conduyte hym that it myght be to god agreable/ ¶ Who that knew wel god and his myſteryes/ he ſhold wel know entyerly phyloſophy/ ¶ They be al good phyloſophers that of them ſelfe haue knowlege/ ¶ Of whom plato Anſwered to ſome that demaunded hym/ and ſayde to hym that he had lerned ynoughe and neded no more/ For he had ſtudyed all his tyme for to lerne/ And it was ſayde to hym/ Mayſtre it is well in you for to ſaye to vs ſom

good worde procedyng of hye entendemēt/as ye haue done other ty
mes/ Than plato how well that he was the moste experymented of
other answered saying as in his herte troubled/that he had nomore
ler ned saue as moche as he that felte hym self lyke vnto a valell that
day and nyght is all voyde and emptye. ¶Thus moche answe
red plato and no more/how well he was at that tyme the most gre
at clerke that was knowen at that tyme in the worlde and of moche
perfoūde science/they that on these dayes wyl medle/take non hede
to answere thus/but make semblaūt to be great clerkes and expert/
for to gette the loos and preysyng of the worde whych ledeth them
to dampnacyon/and bryngeth their folyes to theyre hedes so that
they entende nomore to vertues than doo bestes/For they be not al
clerkes that haue longe typpettys/for there be many that haue the
aray of a clerke/that can not well vnderstand that he redeth/ neyet
some that be prestys can not yet rede trewly/and whan suche knowe
ony thynge that them seme be of valew/Than wene they to know
all/But moche remayneth of theyr folysshe conceyte/¶They be of
the nature of proude foolys that bē surquydrous/that seche not hig
but the glorye and preysynge of the people/and trauayle them self
for to deceyue the worlde/Thys shal they abye dereones/
¶It were better for them to lerne such scyence that sholde make thē
to vnderstande trouthe & tryght/Lyke as these auncyent wyse men
dyd the which preysed not the worlde/that all theyr tyme they occu
pyed in lernyng of philosophy/ Thus studyed auncyent
ly the philosophers to lore theyr dethe for to addresse them to theyre
maker and creatoure/And in dede trauayllyd moche for to dresse all
people to vertue/ ¶They ordeyned the moneys that they
bare for to haue theyr lyuelode in byeng and payeng/For men geue
not alwaye/¶And for couetyse of the people that haue fere of their
despeuces/it corumpeth tryght and nature/For by reason and right
euerych ought to take his lyuenge/ ¶And therfore was
money establysshed for to sustayne to euerych his lyuyng whan they
went by the waye/But they loue their kareynes and fatte bodyes
moche more than nede is/¶And reteyne and kepe more goodes &
richesse than nede/which they lette lye and rote by them and se that
many pore people haue greate nede therof/ ¶The mo-
neys were not founde for this cause/but for to haue theyre lyuynge
vnto the tyme that deth cometh and taketh al that he ought to take
at the pleasure of god/ ¶And thus sholde they be more easyd
than they now be/and euerych sholde haue that hym lacked & they

ſholde lēue to do ſomany ſynnes/ But they be not ſo wyle as were they that by their wytte and entendement founde aſtronomy agayn of whom Tholomeus was one/And now we ſhall recounte to you the greatnes of the erthe/and of heuen, of the mone/of the ſonne/of the ſterres/and of the planettes/whiche thynges be not comon to all men/ ¶The kynge Tholomeus hym ſelfe meaſured them vnto the abyſme/¶Than wyll ye here what he ſayeth herto whiche many another hath alſo prouyd after hym by his boke/the which was named Almageſte.

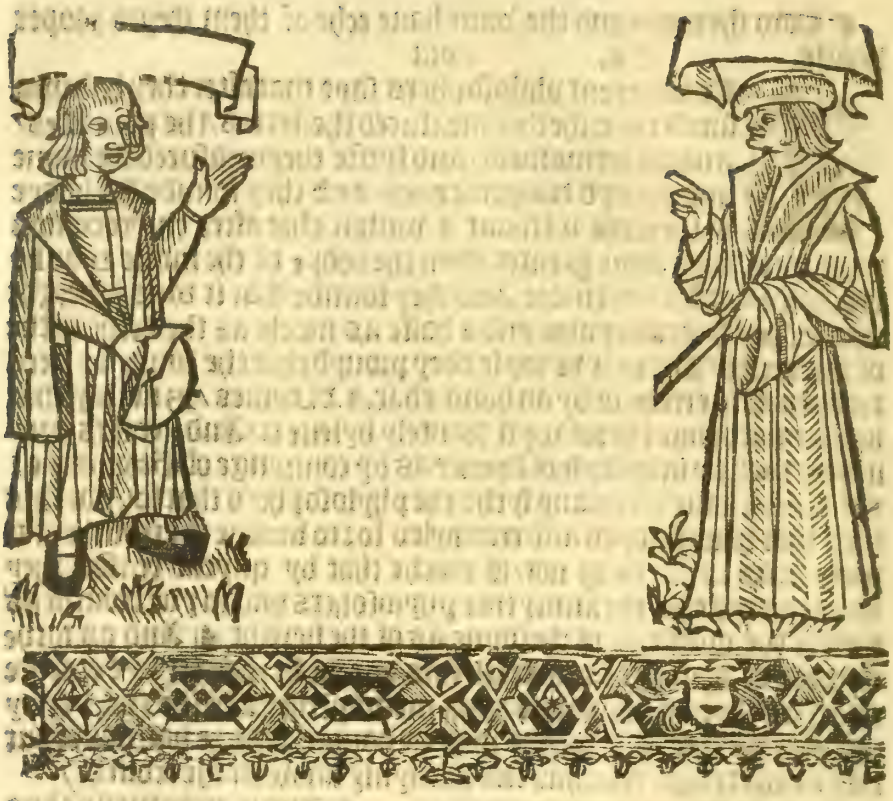


¶How moch the erthe is of heyght rounde aboute and of thicknes in the myddle/; Ca. xviii.

Fyrst of all the auncyent phyloſophers meſured the worlde on
dye vnto the ſterres/of whiche they wolde knowe the meſure for to
knowe the better theyr nature/but fyrſt they wolde meaſure the the
e pꝛoue hys greatnes/e whan they had meaſured it/than they me
ſured it rounde about/lyke as they ſholde haue cõpaſſed it all about
with a gyrdle alla longe/e they foũde it in lengthe. xx. M. C C C C
e. xxvii. myles/e euery myle conteyneth a. M. paas/e euery paas
hyue fote/e euery fote. xxiiii. ynches/So moche hath the erth in leng
the round about/by this founde they how thycke the erthe is in the
myddle/e they foundet he thycknes therof lyke as it ſholde be cleued
in the myddle fꝛo the hyeſt to the loweſt/Oꝛ fꝛo that one ſyde to that
other. vi. M. and. v. C. myles/By this laſte meaſure which is after
nature ryghte/they meaſured iuſtely the heyghte of the fyrmament/
Foꝛ they coude notfynde a greater meaſure foꝛ to ertende the greate
nes of all thynges which ben encloſed within the heuen/

¶ How the mone and the ſonne haue eche of them theyre ꝓpꝛer heyght. ¶ Ca. xviii

THe auncyent philoſophers ſaye that after they had meaſured the erthe they meaſured the ſterres/the planettes/ and the fyrmament/and fyrſte they meaſured the mone and ꝓeuyd hys greatenes/and they founde the bodye of the erthe without & within/that after theyre comon meaſure it was moꝛe greater than the bodye of the mone was by xxx.tymes and a lytel moꝛe. And they founde that it was in heyght aboue therthe.xxvii.tymes and a halfe as moche as the erthe hathe of thyckenes/And in lyke wyſe they ꝓouyd that the ſonne is greater than al the erthe is by an hondꝛed.lx.& vi.tymes/But they that knowe nothynge therof wyll ſcantely byleue it/And yet it is ꝓoued as well by maiſtryſe of ſcyence as by connynge of Geometrye/ Of whych haue ben many ſythe the philoſophers that founde this fyrſt that haue ſtudyed and trauayled foꝛ to knowe the trouthe yf it were ſo as is ſayde oꝛ not/ſo moche that by quycke reaſon they haue ꝓouyd that the auncyente philoſophers had ſayde trouthe as well of the quantyte of the ſonne as of the heyght/¶ And as to the regarde of hym that compyled this werke he lette all hys entente and tyme/bycauſe he had ſo great meruayl therof tyll he had percey ued playnly that of which he was in doubte/And he had neuer put this in wꝛytynge/yf he had not certaynly knowen the trouthe/ and that he had playnely ꝓouyd it. ¶ And it may well be knowen that it is of great quantyte/whan it is ſo moche lerre fro vs and ſemeth to vs ſo lytell/ſhe ſhall neuer be ſo lerre aboue vs/ But in lyke wyſe he ſhall be as ferre whan he is vnder oꝛ on that other ſyde of vs/And foꝛ trouthe it is tro the erthe vnto the ſonne lyue honꝺꝛed.lxx.v.tymes as moche as the erthe may haue of greatenes and thyckenes thꝛughe/



Here folowethe of the heyght of the ſterres and of theyr greatnes. Capitulo. xix.

NOw toyl I recount to you bryefly of the ſterres of the fyrma ment of whiche there is a ryght great nombre/and they bene all of one heyght/but they ben not all of one greatnes/And it behoueth ouer longe narracyō that of all them wolde deſcrye the greatnes/and therfore we paſſe lyghtely ouer and ſhortely/ How well I aduertyſe you & certyfye that there is none ſo lytyll of them that ye may ſe on the fyrmament but that it is greater than all the erthe is But there is none of them ſo great ne ſo ſhynynge as is the ſonne For he enlumyneth all the other by his beaulte/fro the erthe vnto the heuen wherin the ſterres ben ſette in a moche great ſpace/ fore is.x.M.v.C.lv.ſythes as moche more as is all therthe of thyckenes/

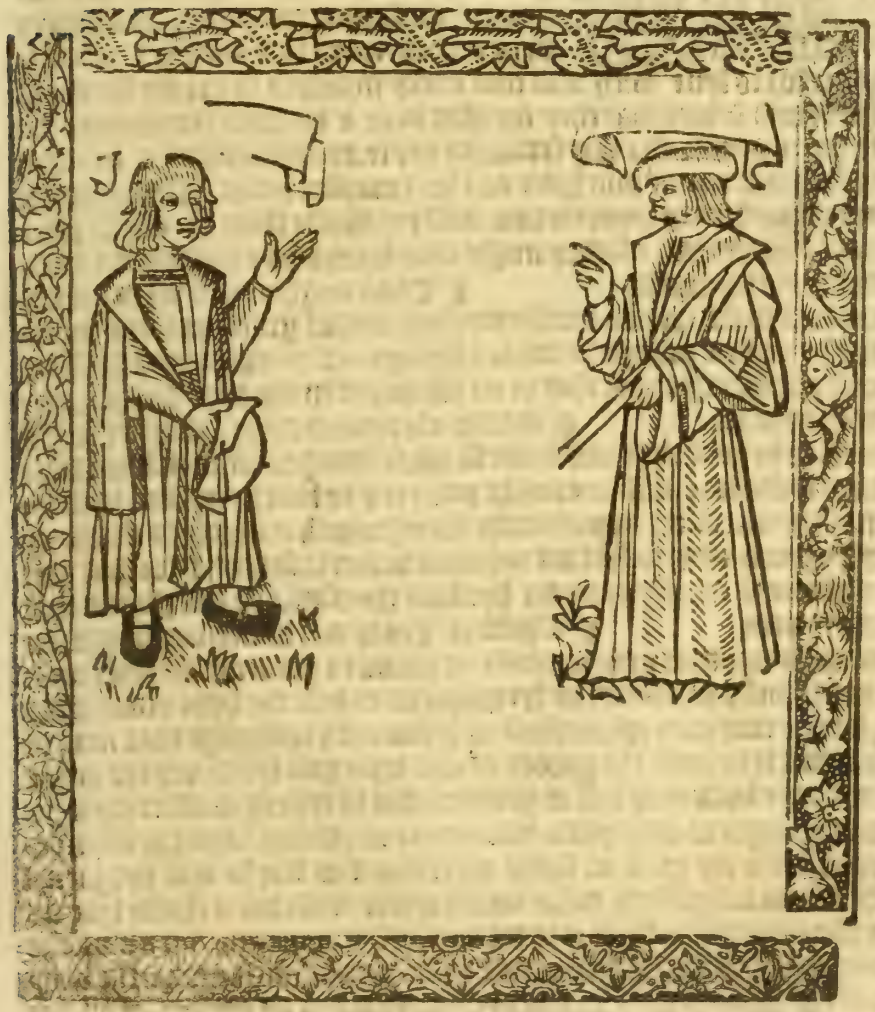
And who that coulde account after the nombre a fourme/ he myght knowe how many ynches it is of the handes of a man/ and howe many fete/ how many myles/ and how many tourneys it is frō hēs to the fyrmament or heuen/ If the fyrste man that god fourmed euer which was Adam had gone frō the fyrst day that he was made & created .xxv. myles euery day/ yet sholde he not haue comen thyder/ But sholde haue yet the space of .vii. C. xiii. yere to go at the tyme/ whan this volume was made/ & this was at Epyphany in the yere of grace .M. C C. and .xlvi. that tyme sholde he haue had so moche to go or euer he sholde come theder/ Dyuers there were a greate stone which sholde fall frō thēs to the erthe/ it sholde be an .C. yere or euer it cam to the grounde/ & in the fallynge it sholde descende in euery hour .xlvii. myle and a half/ yet it sholde be so long or euer it cam to the erth/ & it hath bē proued by hym that cōpyled this present volume/

Here foloweth of the nombre of the sterres. Ca. xx.

¶ Of the regarde of the ſterres we ſhall ſay to you the nombre/ of which there be. M. a. xxii. clere without the. vii. planettes and may be well accounted without any paryl. ¶ In all there be no more than a. M. a. xxix. whiche may well be ſene a eſpied/ There may not well more be eſpyed/ Neuertheles there is no man lyuyng that may or can accompt ſo moche ne mounte ſo hye that ſholde fynde more than the kyng Tholomeus dyd by whiche he knewe and myghte nombre them/ And where euerych ſitteth/ and how ferre it is from one to another/ beit of one or other or nyghe or ferre and the knowlege of the ymages of them whyche by theyr ſemblaūce fourmed them/ For the ſterres whyche be named. ben of fygures on the heuen and compaſſed by ymages/ and that al haue dyuerſe bynges/ And euerych hath hys fourme and hys name/ Of whyche be knowen pryncypally. xlviii. within the fyrmament/ ¶ And of them bene taken. xii. of the moste worthy whyche ben called the. xii. Sygnes/ and they make a cercle rounde aboute the. vii. planettes where as they make theyr tourne/ we ben moche ferre fro heuen merueylouſly/ ¶ And lette euery man knowe that he that dyeth in dedly ſynne/ ſhall neuer come theder/ And the blyſſyd ſowle whyche is departed fro the bodye in good eſtate/ ¶ Nat withſtandynge the longe way is ſone come thether/ ye truly in laſſe than halfe an hour and to the moste hye place to fore the ſouerayne iuge which ſytteth on the ryght ſyde of god the fader in hys bleſſyd heuen/ the whyche is ſo full of delytes/ of all glory/ and of all conſolacyon that there is no man in thys world lyuyng that may ne can eſteme or thynk the ioye and the glory where theſe bleſſid ſoules entreth/ ¶ And there is no man that can eſteme ne thynke the capacyte and greteneſs of heuen ne maye compare it ne valewe it to the capacyty and the greatenes of all the erthe/ or ſo moche as maye compryſe fro the erthe to the fyrmamente. ¶ As to the regarde of the vneſtymable greatnes aboue the fyrmament/ ¶ For the gretnes is neſtymable without ende and without meaſure/ ¶ Certes the fyrmamente on hye is ſo ſpacyus ſo noble and ſo large that of all hys wytte maye not a man vnneth thynke nor eſteme in hys mynde the nombre of lykemalles as all the erthe is/ that ſhoulde fylle yt/ yf they were all in one malle/

¶ Who is he that coude or myght comprehende or comprise the greatnes of them whan they be all assembled and euerych as great as all the erthe/ ¶ Neuertheles we shall say to you therof/as moche as we may well ymagyn/

¶ Of the greatnes of the fyrmament/and of the heuen which is aboue it/. Ca. xxii.

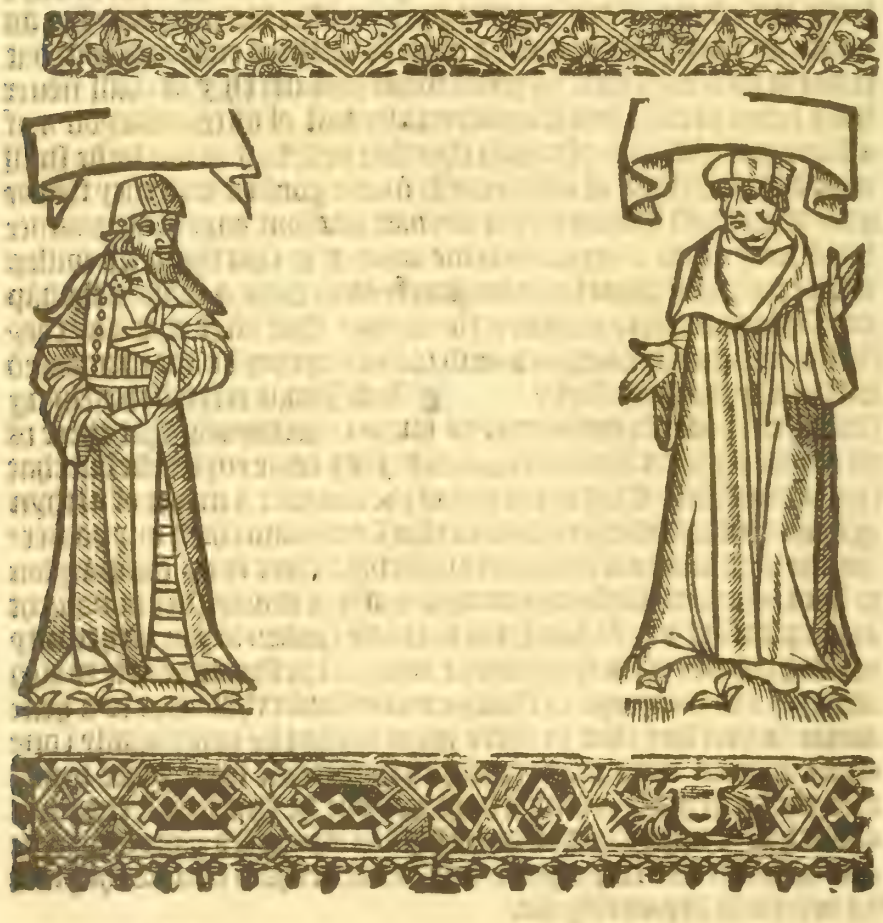


And yf the erthe were so great and hadde so moche space that there myght be therin an hondred thousande tymes more people than euer there was/ and euery man were so myghty for to engendre an other man euery day durynge an hundred thousand yere and that euery man were as great as a gyaunte/and euery man hadde his hous as great as euer had ony kynge/and wodes/ ryuers/gardeyns/medowes/pastures/& byne yerdes/eueriche aboute his castell or place for to lyue with/and that euery man had so greate foyson of golde and syluer that they myghte kepe a hondred seruauntes for to serue hym/and euery seruaunt kepte .xx. seruauntes/& had ther to as great roume and space as their mayster hathe/ All this might be reseruyd in the fyrmamente/and yet sholde there be moche place voyde/more than all they might take for to playe and dysport them therin yf they wolde/ ¶ Than oughte we well to knowe that our lorde god is moche myghty/and of great bountye whan he can make of nought so noble a thynge/as the mone/and the sone/ and all other thynges that be on the heuen in the ayre/on the erthe/ and in the see. ¶ Suche a lorde and suche a mayster ought well to be good that can make so noble thynges/of which we haue very knowlege/and we ought partytely to loue hym/And well we may thynke euery man that the thyng which is aboue is moche gētyll & moch noble/whāt that which is vnder is so subtyl/for that that is aboue is more greater an hondred thousande tymes than it that is bynethe/ ¶ Therfore I may wel vnderstand that there is not thynge that may purpryse ne estemein greatnes ne otherwyse this whiche is aboue the fyrmament/where the heuen taketh his place ne maye be replenyssched ne fylled with nothynge that may be without it be with the goodes of our lorde god fylled/but the ryght debonayr lorde is so full of goodnes that he fylleth all other thynges which ought to haue parte and meryte in goodes/ And the euyll departeth fro the good in suche wyse that it is voyde and dysgarnyssched from all goodes what someuer it be/and that it shalbe lyke as it were nought wherof it is redde that syn is nought/for as moche as it is voyde and disgarnissched of all goodes and rendryd the body and the soule so feble and so dysgarnyssched of all goodes/ of all ver

tues & of all graces that the one is fynally dystroyed and perysshed with the other/for alway the euyll cometh to nought/And contrary the good goth alway growynge and in amendyng/ ¶And therfore there is none euyll but synne whiche is nought/for ye may vnderstande that it cometh to nought as donge/ There is nothynge that ought to be made rygh̄te/but be onely this that ought to be permanēt/ ¶And therfore it is good a man to holde hym nere the good/ For the good amendeth always/and who that customly dothe gladly the good workes they ben the cause to lede hym to heuen/as he that hathe none other withdraught ne other dwellynge place/and therfore he must enhabyt there/hym behoueth to come into heuen for to reteyne there his place/and also for to sytte/ ¶There is noman in the worlde that can do so moche good but that he shall alwaye fynde his place and his repayre proppre after his merytes/For as moche as this so moche noble a place is without ende and without terme in such wyse that no godes what someuer they be shall neuer haue terme ne ende/but it is cōtynually full of all consolacyon & of all ioye and gladnes/of which they that deserue it of our lorde shall haue full possessyon of all the eneftymable goodes/and they that deserue it not shall bienne in fyre eternall without hope of alegeaunce but alway worse fro tyme to tyme/as it is so that the saued soules desyre the day of dome for to be glorifyed in body & soule/& the dāpned soules redoubte & drede it thynkynge that after that day they shalbe perpetually dampned/and to that day they be not turmented in the body but in the soule/ ¶And I haue recyted this thyng shortly to this ende that it may be knowen certaynely that there is no good dede but it shall be rewarded/For none euyll dede but that shalbe punisshed/This is the wyl of the creatour & maker of all thynges without whom there is none that i ony maner hath ony power/ and he is so moche a debonayre lorde that there is no comparyson to hym/& he that all thynge created/made/& establysshed of nought at his pleasure & wyll/but sythe we haue spoken to you of the meftymable greatnes of the fyrmament wherin the sterres be sette which alwaye is in meuynge/so shall ye vnderstande that there is a heuē aboue/where they that be there meue not but be contynually i one estate/lyke as some man remeuyth hym from some place to another/the fyrste place remeuyd hym not/but he that shoulde go so all about lyke rounde aboute a cercle/sholde ofte go fro place to place or euer he sholde come to his place/and at last he sholde come to the place fro whens he departed fyrste/

But that place sholde not meue but holde hym alway in a poynte
¶ Now wyll you vnderstande of this heuen that there is no maner place that is remeuyd fro the sterres ne fro the fyrmament but they holde them also fermely all/as they moste may/This heuen muste be vnderstande by them which ben astronomyers/
This is that gyueth to vs his coloure blewe/the whiche estendeth aboue the ayre/the which we see whan the ayre is pure and clere al about/And here afterwarde we shall shew you of the heuen crystal lyn and of other maters.

¶ Here after folowyth of the heuen crystallyne and of the heuen imperyall. Capitulo. xvii.



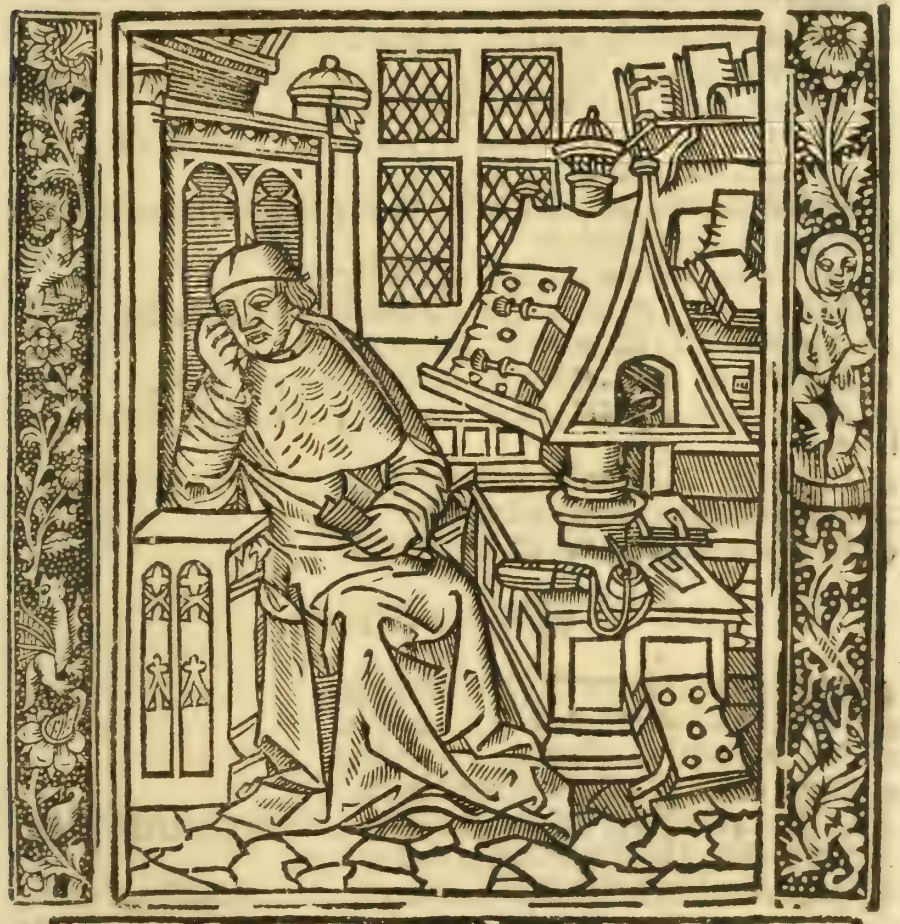
Aboue this heuen that we may se blewe as the auncyente clerkes saye/there is another heuen all rounde about that aboue and bynethe/lyke as it were of the colour of whyte crystall/clere and pure and moche noble/& is called the heuen crystallyn/& aboue this heuen crystallyne all rounde about that is an other heuen of the colour of purple/& that is called the heuen imperyall/This heuen is garnysshed full of all beautyes more than ony of the other that we haue named/& there is the ayre. vii. tymes more faire and more clere than is the sonne/fro this heuen imperyall dyd fall the euyll angels by theyr pryde/the which were bygarnysshed of all glorye and of all goodes/And there ben the blessyd angels of our lorde/

¶ Here foloweth of the Celestyall heuen. Ca xxvi.

If ye wyll vnderſtande for to know of this heuen celeſtyal which is aboue all the other/ ye ſhall vnderſtand that this place is ryght worthy and blyſſed in all thynges/ wherſo re there may nothynge growe but al goodnes/ & ſwetenes by reaſō & ryght/ For there is no where ſo good a clerke that may thynke the .x. parte of the glorye that is there/ and yf oure lorde purpoſeth any place/ hym behoueth to haue that by ryght/ but he is ſo comon ouer all/ that he ſeethe euery man that hathe deſeruyd it agaynſte hym/ and ſeeth all thynges al about/

¶ In this heuen be all the aungels/ the archangels/ and all ſayntes which ſynge all to gyddre before god glorye and laude with greate ioye and conſolacyon/ ¶ There is none may comprehende ne vnderſtande what thynge is heuen/ and how moche greate ioye they haue to whom he hath gyuen and graūted it the beſt clerke of the worlde the moſte lubtyll/ and the beſt ſpekynge with all that euer was lyuynge in erthe or euer ſhalbe in ony tyme of the worlde/ & thoughe he had a thouſande tonges ſpekynge and euerych of the tonges ſpake by hym ſelfe/ & alſo had a thouſande hertes within his body the moſt ſubtyl and the moſte memoratyfe that myght be taken and founde in all the worlde and beſt choſen to vnderſtande & to experyment/ and yf this myghte be to gyddre in the bodye of a man and after myghte thynke alwaye the beſt wyſe that they coulde deſcrye the eſtate of heuen/ and that euery tonge myght ſaye and declare the entencyon of euery herte/ yet myght they neuer in no maner of the worlde ſayne recount the thouſande parte of the great ioye that the poreſt and leſte of them that ſhall be there ſhall haue/ And foule be he that ſhall not be there/ for they that ſhall be in heuen wolde not be all the dayes of theyr lyfe Lordes and kynges of all the monarchye of the worlde ere they thoughe al theyr commaundementes myghte be obſerued and done not for to be one onely hour out of heuē/ for there is the lyfe per durable/ & there is the ryghte parfyte and ynestymable glorye that euer was and euer ſhalbe/ ¶ Therin is enabylyed the ioye and the glorye whyche neuer ſhal haue ende to the whyche god bryngе vs all/

Here followeth the recapitulacion of the the thynges tofore sayd/
Ca. xxiiii.



In this we shall make an ende of our boke/the whiche at
his begynnynge speketh of our lorde god wherfore he fourmed the worlde/
¶ Also why he loued man so well that he fourmed hym to his semblaunce/
¶ And how he gaue hym power to do well and euyll/
¶ After why he made hym not suche that he might not synne deldy.
¶ And how fyrste were founde the. vii. sciences.
¶ Syth it speketh of thre maner of people that thauncient philosophers put in the worlde.
¶ How nature worketh/and what she is/and how she dyuersefieth in euerych of her workes/
¶ Also ye haue herde of the facion of the worlde.
¶ And of the deuyson of the foure Elementys whiche ben rounde aboute/and holde them on the fyrmament/
¶ And how the erth holdeth hym within the fyrmament.
¶ Also ye haue herde of the lytynes of the erthe vnto the regarde of heuen/
¶ And also how the sonne maketh his cours all aboue the erthe. And the other planettes in lyke wyse/
¶ All thys haue ye herd in the fyrst partye/

¶ The seconde partye.

¶ Why che parte of the erthe is Inhabyted/
¶ And of the dyuyson of Mappe mundi.
¶ And fyrst it speketh of paradys terrestre/
¶ Of the contreys and regyons of Inde/
¶ Of the dyuersytees that ben therof men/of beestes/of trees/of stones/of byrdes/and of som fisshes that be there.
¶ And also where helle the dolourous place is and standeth and of the great payns that they endure that ben dampned and ben there/
¶ After ye haue herd of the seconde element/That is of the water
¶ Of the flodes and of the fountayns hote and colde/holsem/and euyll why che ben in dyuerse countrees/
¶ How the see becometh salte/
¶ How the erthe quaueth and trembleth/.
¶ How it rayneth and bloweth/
of tempestes and of thondres/
¶ Of fyre of lyghtenynge/

¶ Of the sterres which seme to fall/
¶ Of the pure ayre/and of the.vii. planettes/
¶ How the bysente cometh/
¶ Of the fyrmament & of his tornynge/and of the sterres that ben
rounde aboute therin/

¶ In the thyrde partye/

¶ Fyrst how the day and the nyght cometh/
¶ Of the mone and of the sonne how they rendre theyr lyght/and
how eche of them leseth theyr clerenes by nyght and by daye/
¶ Of the eclyse that happen than wherby the day becometh derke/
¶ Of the eclypse that felle at the dethe of our lorde Jesu cryste/by
which sayne Denys was afterwarde conuerted/
¶ Of the vertue of the fyrmament & of the sterres/
¶ And how the world was measured and the heuen and the erthe.
¶ Of the kynge Tholomeus & of his prudence/
¶ How the.vii. scyences were saued agaynst the flode.
¶ And how it was founde agayne after the flode/
¶ Of the mervayles that Virgyll made/
for what cause money was so establysshed.
¶ Of the philosophers that went thrughe the worlde for to lerne
what thynge is philosophy/and what Plato answered therto/
¶ How moche the erthe/the mone/and the sonne haue of greatnes
euerych of hym selfe/
¶ Of the ymages of the sterres/
¶ And also the nombre of them/& of theyr ymages/
¶ The heyght & greatnes of the fyrmament.
¶ And of the blew heuen which is aboue that.
¶ And of the heuen crystallyne and of the heuen imperyall.
¶ And also of the heuen Celestyal where as is the fader/The sonne
and the holy ghost/to the which place god brynge vs all. Amen/

¶ Thus endeth this boke named the myrrour of the worlde/

¶ Enprynted by me Laurence Andrewe dwel
lyngein fletestrete/at the sygne of the golde
crolle by flete brydge/

¶ Cum gratia et priuilegio illustrissimi regis.